Isaac Vossius (1618–1689) between Science and Scholarship

Brill's Studies in Intellectual History

General Editor

Han van Ruler, Erasmus University Rotterdam

Founded by

Arjo Vanderjagt

Editorial Board

C.S. Celenza, Johns Hopkins University, Baltimore
M. Colish, Yale University
J.I. Israel, Institute for Advanced Study, Princeton
M. Mugnai, Scuola Normale Superiore, Pisa
W. Otten, University of Chicago

VOLUME 214

Isaac Vossius (1618–1689) between Science and Scholarship

Edited by
Eric Jorink and Dirk van Miert



BRILL

LEIDEN • BOSTON 2012

Cover illustration: Manuscript notes by Isaac Vossius in his copy of Isaac La Peyrère's Praeadamitae (LUB, shelfmark 501 E 3). See the contribution by Susan Derksen in this volume.

Library of Congress Cataloging-in-Publication Data

Isaac Vossius (1618–1689), between science and scholarship / edited by Eric Jorink and Dirk van Miert.

```
p. cm. — (Brill's studies in intellectual history)
Includes bibliographical references and index.
ISBN 978-90-04-18670-5 (hardback: alk. paper) — ISBN 978-90-04-23311-9 (e-book) 1. Vossius,
Isaac, 1618–1689. 2. Naturalists—Netherlands—Biography. 3. Biblical scholars—Netherlands—
Biography. 4. Europe—History—17th century. I. Jorink, Eric. II. Miert, Dirk van.
```

```
QH31.V67I83 2012
508.092—dc23
[B]
```

2012017166

This publication has been typeset in the multilingual "Brill" typeface. With over 5,100 characters covering Latin, IPA, Greek, and Cyrillic, this typeface is especially suitable for use in the humanities. For more information, please see www.brill.nl/brill-typeface.

```
ISSN 0920-8607
ISBN 978 90 04 18670 5 (hardback)
ISBN 978 90 04 23311 9 (e-book)
```

Copyright 2012 by Koninklijke Brill NV, Leiden, The Netherlands. Koninklijke Brill NV incorporates the imprints Brill, Global Oriental, Hotei Publishing, IDC Publishers and Martinus Nijhoff Publishers.

All rights reserved. No part of this publication may be reproduced, translated, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from the publisher.

Authorization to photocopy items for internal or personal use is granted by Koninklijke Brill NV provided that the appropriate fees are paid directly to The Copyright Clearance Center, 222 Rosewood Drive, Suite 910, Danvers, MA 01923, USA. Fees are subject to change.

This book is printed on acid-free paper.

CONTENTS

List of Abbreviations	vii
List of Figures	ix
Acknowledgements	xiii
Introduction. The Challenger: Isaac Vossius and the European World of Learning Eric Jorink and Dirk van Miert	1
The French Connection: From Casaubon and Scaliger, via Saumaise, to Isaac Vossius Dirk van Miert	15
Isaac Vossius, Chronologer	43
Isaac Vossius and the Septuagint	85
In the Twilight Zone: Isaac Vossius and the Scientific Communities in France, England and the Dutch Republic	119
A View from the Mountaintop: The Development of Isaac Vossius' Optics, 1658–1666	157
In the Shadow of Jesuits: Isaac Vossius and Geography	189
Vossius' Chinese Utopia	207
Isaac Vossius, entre Philologie et Philosophie	243

vi CONTENTS

Manuscript Notes in Books from the Vossius Collection	255
Collecting the Ultimate Scholar's Library: The <i>Bibliotheca</i> Vossiana	281
Epilogue: Isaac Vossius in Context Eric Jorink and Dirk van Miert	311
BibliographyIndex of Names	319

LIST OF ABBREVIATIONS

Fede, Sacra Congregazione dell'Indice

LIST OF FIGURES

Di	rk van Miert	
1.	Intellectual family tree of philologists on Dutch soil, first half	
	of the 17th century	17
	•	·
Er	ic Jorink	
	A page taken from René Descartes, <i>La dioptrique</i> , one of the	
	Essays following the Discours de la méthode (Leiden 1637)	
	(LUB)	126
2.	A page taken from Isaac Vossius, <i>De lucis natura</i> (The Hague	
	1662): the lay-out is clearly copied from Descartes' <i>Dioptrique</i>	
	(LUB)	127
2	Fragment of a page of Descartes' <i>La dioptrique</i> , on the	/
٦.	corporeal nature of light (LUB)	128
1	Fragment of a page of Vossius, <i>De lucis natura</i> , explicitly	120
4.	rejecting Descartes and arguing for the existence of the	
	vacuum (LUB)	129
=	and 6. In <i>De Nili origine</i> (The Hague 1666), Vossius not only	129
э.	included maps, but also referred to experiments and	
	calculations, and made use of the visual language of the New	
	Science (LUB)	104
	Science (LOB)	134
Fo	kko Jan Dijksterhuis	
1.	Vossius, Observationes ad Pomponium Melam,	
1.	illustration on page 125 (LUB)	160
0	Huet to Vossius, 4 March 1659 (AUB, Ms. RK III	100
2.	E. 9, no. 214)	- C -
_	,	164
3.	Refraction in burning sphere as later depicted in Vossius,	- C -
	De lucis natura, page 57	165
4.	Huet to Vossius, 4 March 1659 (AUB, Ms. RK III	CC
	E. 9, no. 214)	166
5.	Vossius to Huet, 14 August 1659 (LUB, Ms. Bur Q22:2, fol. 253 ^r)	167
	. Vossius to Huet, 4 May 1660 (LUB, Ms. BPL 885, fol. 3 ^r)	169
6b	• (_
	fol. 266)	169
7.	Refractaria in Vossius, <i>De lucis natura</i> , page 37 (LUB)	172
8.	Tube experiment in Vossius, De lucis natura, page 45 (LUB)	173

9a-	–9b. Refractaria and vision through the atmosphere in Vossius, 'Appendix ad scriptum de natura lucis' (in: <i>De Nili origine</i>)	
	pages 107 and 124 (LUB)	1
10.		
	Voyages, accompanying page 42 (LUB)	1
Ka	rel Davids	
1.	Map, showing the origin of the Nile. Taken from Vossius,	
	De Nili origine, between pages 48 and 49 (LUB)	1
	0 / 10 / 10 (/	
Th	ijs Weststeijn	
1.	The 'Chinese' painter Higiemondo, from Joachim von Sandrart,	
	Teutsche Academie (Nuremberg 1675), Vol. I, Part II, page 200	
	(AUB)	2
2.	An example of Chinese painting from Olfert Dapper,	
	'Beschryving van geheel Sina', in: Gedenkwaerdig bedryf der	
	Nederlandsche Oost-Indische Maetschappye op de kuste en in	
	het keizerrijk van Taising of Sina (Amsterdam 1670), facing	
	page 106 (AUB)	2
3.	An example of Chinese painting from Dapper, 'Beschryving	
J.	van geheel Sina', facing page 108 (AUB)	2
4.	An example of Chinese painting from Dapper, 'Beschryving	
٦.	van geheel Sina', facing page 110 (AUB)	2
5.	An illustration of the Chinese way of writing from Athanasius	
<i>J</i> .	Kircher, <i>China illustrata</i> (Amsterdam 1667), page 233 (AUB)	2
6.	The goddess 'Pussa', from Kircher, <i>China illustrata</i> , facing	-
٠.	page 140 (AUB)	2
7.	Examples of Chinese characters (on the upper row) and their	_
7.	purported origin in pictograms (on the lower row), from	
	Kircher, China illustrata, page 223 (AUB)	2
8.	The characters invented by emperor Fohi, from Kircher, <i>China</i>	_
0.	illustrata, page 228 (AUB)	2
9.	Ancient characters based on pictograms of herbs and bundles	
9.	of leaves (left) and birds (right), from Kircher, <i>China illustrata</i> ,	
	page 230 (AUB)	2
10	Ancient characters based on pictograms of fishes (right);	2
10.	inscription 'forbidden to lend or borrow money' (left), from	
	Kircher, China illustrata, page 232 (AUB)	2
	NITCHEL CHING HUSHAUG DAYE Z32 (AUD)	- 2

LIST OF FIGURES

11.	Ancient characters based on pictograms of plants and stars, forms from ancient edicts and others, from Kircher, <i>China</i>	
	illustrata, page 231 (AUB)	236
12.	Title page of Athanasius Kircher, Ars magna sciendi	
	(Amsterdam 1669) (AUB)	237
13.	'Alphabeta artis', from Kircher, Ars magna sciendi, page 24	
	(AUB)	238
Su	san Derksen	
1.	Vossius' handwriting in the preface of the <i>Judaicarum</i>	
	responsionum et quaestionum consideratio by Johannes	
	Coccejus (1603–1669) (LUB, shelfmark 510 C 16)	257
2.	Vossius' reaction ('Ubi admitto?'/'Where do I admit this?') to	
	an allegation on page 6 of the Authentia absoluta s. textus	
	hebraei vindicata by Antonius Hulsius (1615–1685) (LUB,	
	shelfmark 499 F 3)	257
3.	Vossius' handwriting on page 152 of Cappell's Chronologia	
	sacra (LUB, shelfmark 506 D 8:1)	263
4.	Vossius' handwriting on page 108 of the Praeadamitae (LUB,	
	shelfmark 501 E 3)	272
As	trid C. Balsem	
1.	Title-page of: Catalogus variorum & exquisitissimorum	
	librorum Gerardi Ioannis Vossii. Quorum auctio habebitur in	
	aedibus Petri Leffen bibliopolae sub signo Phoenicis.	
	[Die Mercurii 4 Octobris] Anno 1656 (Leiden 1656) (AUB,	
	shelfmark KVB Nv 4a)	283
2.	Title-page of: Catalogus librorum illustrium, quorum auctio	
	habebitur Lugduni in Batavis in aedibus Petri Leffen Sub Signo	
	Phaenicis. Ultimo Novembris Anni 1666. hora nona matutina	
	(Leiden 1666). (Hamburg, Staats- und Universitätsbibliothek,	
	shelfmark A301263)	285
	Gronovius' ledger, page 1, auction Vossii (LUB, Ms. BA 1. F1)	290
4.	Gronovius' ledger, page 4, auction Junii (LUB, Ms. BA 1. F1)	292

ACKNOWLEDGEMENTS

The history of this book goes back to 1-3 November 2007, when we organized the conference Between Scholarship and Science. The Wonderful World of Isaac Vossius (1618–1689). It was a kind of travelling circus, moving from Amsterdam, via The Hague to Leiden, where an exhibition on Isaac Vossius was opened in the University Library on the last day of the conference. We would like to thank the institutions who hosted and in various ways supported us: the University of Amsterdam and the Amsterdams Centrum voor de Studie voor de Gouden Eeuw, especially Henk van Nierop; the Huizinga Instituut – Researchschool and Graduate Institute for Cultural History, especially Paul Koopman; the Huygens Institute (now: Huygens Institute for the History of the Netherlands; Royal Netherlands Academy of Arts and Sciences), especially Henk Wals; and the Scaliger Institute and Leiden University Library, especially Paul Hoftijzer, Kasper van Ommen, Anton van der Lem and André Bouwman. A special word of thanks to Marika Keblusek and Astrid C. Balsem for their contributions to the exhibition. We received generous financial support from the Dr. C. Louise Thijssen-Schoute Stichting. A final word of thanks to Arjo Vanderjagt, who accepted our proposal to submit a volume on Isaac Vossius to the editorial board of *Brill's Studies in Intellectual History* with enthusiasm, and to his successor, Han van Ruler, for the great care in supervising the editors of the present volume. We heartily acknowledge that it is a great privilege to be included in this series.

The editors

INTRODUCTION. THE CHALLENGER: ISAAC VOSSIUS AND THE EUROPEAN WORLD OF LEARNING

Eric Jorink and Dirk van Miert*

Why Isaac Vossius?', we were asked when organizing the conference on which the present volume is based – 'is there a date to commemorate?' The answer, we had to concede, was no. There was no historic reason for a conference: we began the project simply because we both stumbled upon the young Vossius, started to like him and loved to hate him. We soon discovered that other friends and colleagues were intrigued by this idiosyncratic figure as well. What fascinated us most was Vossius' equal dedication to both erudition and empiricism, to both scholarship and science – and that his work was equally respected among humanists and natural philosophers. Contemporary sources testify to the fact that Vossius, together with Christiaan Huygens (1629–1695), was then considered the Dutch Republic's foremost student of nature, and one of the central figures of the European world of learning.

Isaac Vossius (1618-1689) is remembered predominantly for his magnificent library and his philological studies. He was the only surviving son of his famous father, the great humanist Gerardus Joannes Vossius (1577-1649), with whom he is still often confused. Unlike his father, no known portraits of Isaac have survived. While the pious Gerardus had oscillated between revealed and natural theology, Isaac seemed to inhabit the twilight zone between scepticism and atheism. Already early in his career, it was rumoured that he was a freethinker and libertine. Moreover, he was accused of the theft of books and even of poisoning René Descartes (1596-1650).

 $^{^{\}ast}$ We would like to thank Rens Bod and Anthony Ossa-Richardson for their valuable comments.

¹ See, for example, the index of Chapelain, *Lettres authentiques*, 579. Discussing Isaac in the context of the French intellectual world, Soll, *The Information Master*, 127, mistakenly calls him J.G. Vossius'.

 $^{^2\,}$ On Isaac Vossius in general see: De Vries, 'Vossius (Isaac)'; Seccombe and Blok, 'Isaac Vossius'; De Smet, 'Vossius, Isaac'.

Frans Blok dedicated a monumental work to the life and network of Vossius during the first half of his life, up to the end of his career as a librarian to Queen Christina of Sweden.³ After this period, Vossius' star continued to rise, but this part of his life is rather obscure. Scholars who study European intellectual life in the second half of the seventeenth century, and above all those involved in the history of biblical scholarship, are familiar with Vossius' work, most notably on the Sibylline oracles, but his other works remain virtually unstudied.⁴

Vossius' philological exercises and book-dealing formed only a part of a much broader range of activities. He liked to challenge received opinions, and with obvious delight found new fields of inquiry or elaborated further on themes that had occupied the keenest minds of his age, including his father's. For example, in 1659 he launched an explosive work on biblical chronology, De vera aetate mundi, in which he claimed that the world was 1440 years older than the great Josephus Justus Scaliger (1540–1609) and others had assumed. In his own days, Vossius was recognized as an expert in the field of geography and navigation, perhaps the greatest of the century. He published books on the winds and tides and the origin of the Nile, and was commissioned by the Dutch East India Trading Company (VOC) – at that time the most important commercial organisation in the world – to give advice on tropical monsoons. Vossius was also the author of a controversial work on the nature of light, De lucis natura (1662), and he made observations with both the microscope and the telescope. He knew the works of Descartes quite well but strongly rejected his natural philosophy. In Paris, Vossius moved in the intellectual circles from which the Académie Royale des Sciences would emerge in 1666. Here, he frequently held discourses on, for instance, air pressure in Africa or the mountains on the moon. At an early date, 20 April 1664, he was elected Fellow of the recently established Royal Society. He was on friendly terms with the Society's secretary, Henry Oldenburg (ca. 1618–1677), who urged him to publish papers on burning mirrors and ballistics. Charles II asked Vossius to make a new map of the world, on the basis of the latest information brought in by seafarers and surveyors.

³ Blok, *Vossius and his Circle*. On the first half of Vossius' life see also: See also: Ter Horst, *Isaac Vossius en Salmasius*; Blok, *Contributions*; Idem, 'Isaac Vossius and the Blaeus'; Idem, 'Verdwaalde papieren'; Idem and Rademaker, 'Isaac Vossius' Grand Tour'.

⁴ Katz, 'Vossius and the English Biblical Critics'.

Vossius moved in a circle of philologists and natural philosophers – a world not yet divided along disciplinary boundaries. On the one hand, Vossius' involvement reveals that his 'scientific' work was taken seriously by the consensus of his learned peers. On the other hand, his membership should make us aware that the *académies* and informal learned gatherings were not only important for the advancement of what today is called (natural) 'science', but also kept abreast of philological developments.

Thus far, Vossius' scientific pursuits have escaped the notice of historians. Until some decades ago, historians of science were mostly concerned with teleological concepts such as 'the mechanization of the world view' and, as a consequence, thoroughly studied the mathematical epistemology of his contemporaries Isaac Newton (1643–1727) and Christiaan Huygens.⁵ The humanist interest in the study of nature was mostly neglected. If recognized at all, it was considered an impediment to the 'rise of the New Philosophy'. On the other hand, generations of scholars have studied the Neo-Latin works by Gerardus and Isaac Vossius and other humanists from a philological perspective, paying attention to their literary style and their use of classical sources. Thus historians tended to see a sharp contrast between literary and scientific culture, in the wake of C.P. Snow's 'two cultures'. In other words, for a long time seventeenth-century humanist discourse on nature was not distinguished as such, either by historians of science, or by scholars of classics.

Scholars such as Eugenio Garin, and more recently Anthony Grafton, Ann Blair and Paula Findlen have put the humanist discourse of science on the map. 'The two cultures', Grafton writes in his *Defenders of the Text*, 'were not locked in the battle that the pamphleteers of the New Science called for; they coexisted and often collaborated'. What would later be called 'science' was not evident at all during this period. It has become clear that, from a seventeenth-century perspective, it is impossible to draw a sharp distinction between 'scholarship' and 'science'. Fellows of royal academies, citizens of the 'Republic of Letters', members of informal groups of erudites and other isolated intellectuals felt no need to distinguish between the two.⁷

Since historians have begun to study seventeenth-century intellectual culture in its own right, rather than from a teleological or positivist

⁵ See, for example, Dijksterhuis, *The Mechanization of the World Picture*; Van Berkel, Van Helden and Palm, eds, *A History of Science in the Netherlands*.

⁶ Grafton, Defenders of the Text, 5.

⁷ Goldgar, *Impolite Learning*; Grafton, *Worlds made by Words*.

point of view blinkered by disciplinary boundaries, they have put other themes on the agenda as well. Important in this respect, for example, is the 'culture of curiosity', which formed the intellectual as well as the social background for many seventeenth-century scholars. Wonders of nature' formed the nucleus of a community of discourse, in which collecting, describing, depicting, exchanging, debating and self-fashioning were as important as publication. Recent scholars have studied not only the canonical figures of early modern natural philosophy and physics, such as Descartes, Huygens and Newton, but also thinkers who are now largely forgotten but who were extremely popular or influential at the time, such as Nicolas-Claude Fabri de Peiresc (1580–1637) and Athanasius Kircher (1602–1682).

Vossius had much in common with Kircher, as Grafton, Davids and Weststeijn point out. Vossius' methods, as well as his style, were far from exemplary and were deemed extraordinary even by some of his contemporaries. If it is uncertain that Charles II ever made his remark about Vossius ('This man believes everything as long as it is not in the Bible'),¹¹ the characterisation has nevertheless been echoed throughout the generations. The King's alleged remark points forward to the bewilderment taking possession of historians who encountered Vossius' works and dismissed him on the basis of the blind alleys he seemed to have taken, or the variety of apparently divergent subjects he addressed, ranging from the science of ancient China to the skills of Amsterdam goldsmiths, and from the construction of triremes to the existence of the vacuum. But Vossius was a well known figure in the European world of learning, travelling far and wide, using different types of transport and many languages, copying manuscripts, sending letters, annotating the works of others, publishing thirteen books, and making himself known in the most remote locations of the Gelehrtenrepublik. The relevance for his contemporaries tells us much about the European world of learning.

While humanist philology was being transformed into specialised areas of knowledge known as classical scholarship and biblical criticism, Vossius

⁸ Kenny, Curiosity in Early Modern Europe; Idem, Uses of Curiosity; Kenseth, ed., Age of the Marvelous; Findlen, Possessing Nature; Daston and Park, Wonders and the Order of Nature.

⁹ Ogilvie, *Science of Describing*; Goldgar, *Tulipmania*; Cook, *Matters of Exchange*; Dupré and Lüthy, eds, *Silent Messengers*; Van Gelder, *Tussen Hof en Keizerskroon*; Jorink and Ramakers, 'Undivided Territory'.

¹⁰ Miller, *Peiresc's Europe*; Findlen, ed., *The Last Man Who Knew Everything*.

¹¹ Nicéron, Mémoires, 133.

5

was one of those erudites who enriched a general humanist learning with the culture of curiosity which informed the early Enlightenment. During his career, he transformed himself from a philologist into a philosopher, from an editor into an oracle. Gradually, his field of operations moved from the solitude of the study to the bustle of the real world. Vossius was representative of a time in which Robert Boyle (1627–1691) and Newton were as much involved in theological, philological and hermeneutical problems, as Isaac Vossius was in dealing with tides and light.¹² The expansion of knowledge still had not forced the Diltheian split between the humaniora and the natural sciences.¹³ With his various methods, including textual criticism, historical antiquarianism, observation, reason, and rational calculation, Vossius embodied the variety of interests of his time. Although the dubious quality of his critical skills and mathematical knowledge is the sign of a time when cutting-edge knowledge was growing too specialized for the general curieux, the second half of the seventeenth century, the split between professionals and amateurs, between 'science' and the humanities, was not as marked as in the eighteenth century. The eighteenth century witnessed a huge increase in conscious efforts to bridge that gap and explain the results of scientific research to a public of interested amateurs.

Seen from this broader perspective, Isaac Vossius is an extremely rewarding subject. Which subjects did he address, and with what audience in mind? Are his activities as divergent as they first appear, or are there some underlying patterns? What material did he use, where did he get it from, and how did he treat it? What methods did he adopt? To answer these questions, some of Vossius' lesser known works need to be studied, and his celebrated texts grant a closer inspection.

This volume brings together ten essays which study various aspects of Vossius' learning on the basis of sources which have thus far attracted little attention – letters, notes, and his works on natural philosophy and geography. As will become clear, his work is less eccentric than it seems. It can be maintained that Vossius gives us an intriguing insight into seventeenth-century erudition, a world that now looks at once so familiar and so astonishing.

¹² Cf. Hunter, *Robert Boyle*; Mandelbrote, 'Newton and Eighteenth-Century Christianity'; Thouard, 'Folgen der Philologisierung'.

¹³ Cf. Bod, Maat and Weststeijn, eds, *The Making of the Humanities*; Bod, *De vergeten wetenschappen*.

Most of the papers deal with the second half of Vossius' life. This was a conscious choice. We have Frans Blok's engaging and informative biography of the first half of Vossius' life, but our view of the second half, when he made his claim to fame in the European intellectual world, remains fragmented. Although the focus of this volume has not been Vossius' biography, we have organised the contributions chronologically as much as possible. The articles may thus form a contribution to his *intellectual* biography.

To understand this narrative, the first article traces Vossius' intellectual roots. Gerardus Joannes Vossius largely taught his own children, and it is evident that he exercised a profound influence on Isaac's formation, especially where it comes to the basics of Isaac's intellectual formation: Latin and Greek, the classics, the Church Fathers. But it was Claude Saumaise (1588–1653) who would set out some of the most important directions for Isaac's research: the Greek Anthology, geography, chronology, and ecclesiastical history. Saumaise himself had been influenced by two teachers: Isaac Casaubon (1559-1614) and Joseph Scaliger, and these giants of scholarship also influenced Isaac Vossius, either directly, or via Saumaise. Vossius inherited his interest in manuscripts not from his father, but from men like Casaubon and Scaliger, his intellectual 'grandparents'. His lack of interest in poetry may also be due to this 'French connection'. Isaac would have been naturally drawn to Scaliger and Saumaise for psychological reasons as well: he must have been attracted to their polemical minds, for like them, he was not afraid to let himself in for a bit of criticism. Vossius was far more of a challenger than most of his contemporaries. Whereas Gerardus was a pedagogue as attentive as they come, Isaac, like Scaliger, Casaubon and Saumaise, was reluctant to teach – to lecture, to preside over disputations, to compose textbooks. He took instead to the French giants who specialised as philologists and antiquarians and who explored the remote areas of scholarship.

One of these areas was chronology – a field less obscure then than it is considered today. Anthony Grafton describes the tumultuous impact of chronology on seventeenth-century scholarship and theology. He traces some of the main scholars in the Republic who engaged with chronology before Vossius and explains the problems they were confronted

¹⁴ Not least because only fragments of his enormous correspondence have been edited, and nobody has ventured to take up the task of studying the letters systematically. Drawing up an inventory remains a necessary future task.

with: Greek, Hebrew, Latin and Samaritan texts of the Bible each gave the patriarchs of Genesis different life-spans. In previous studies, Grafton has already clarified the centrality of Joseph Scaliger for chronology, but below he also traces the attempts of Vossius' father Gerardus Joannes to accommodate Scaliger's most radical claim by wielding the weapons of historical philology. Via Gerardus Joannes, Isaac was once more influenced by Scaliger when he published his *De vera aetate mundi* in Latin in 1659.

Scaliger's meticulous philological, linguistic, historical and mathematical research resulted in a prohibitively large and complicated book, whose conclusion, if accepted, must have devastating implications for the Christian view of history. At that point, Scaliger proceeded no further. But nor did he turn back. Gerardus Joannes tried to strike a compromise with Scaliger's claim that the Egyptian lists of kings were genuine, interpreting them in such a way as to accommodate the established Christian chronology. For the elder Vossius it was the profane source which was in need of a different interpretation, not the Christian source.

Isaac Vossius went much further. In Vossius' view, the conflict was not only between profane and Christian traditions, but also between two traditions within Christian philology: the Hebrew Masoretic text had to yield to the Greek text of the Septuagint, which was compatible with non-Christian philological evidence. In this way, he also managed to incorporate a pagan tradition even older than the Egyptian lists: Chinese chronology. For it was this chronology upon which one of the most execrated authors of the 1650s had relied: Isaac La Peyrère (1596–1676). Vossius thus copied Scaliger's and even La Peyrère's method of granting trust to pagan tradition. Paradoxically, Vossius undermined traditional Christianity – the *Hebraica veritas* – in an attempt to save the Christian tradition, i.e. the Greek Bible. If compared with the tomes of Scaliger, James Ussher and his own father, his slim *De vera aetate mundi* is rather a radical pamphlet than a serious scholarly treatise, as both Grafton and Mandelbrote underscore.

As Scott Mandelbrote shows, it was precisely Vossius' experience with the Greek text and his general interest in manuscripts which made him an ideal candidate to edit, or oversee the edition of, the most important manuscript of the Septuagint: the Codex Alexandrinus, which had been guarded in England since 1627. As a young man visiting England, Vossius had already familiarized himself with some of the most important figures who engaged themselves with the Codex Alexandrinus: Patrick Young, James Ussher (1581–1656) and John Selden (1584–1654). Vossius had not

only attracted the attention of the English. Mandelbrote traces the reception of Vossius' *De vera aetate mundi* by the Roman Congregation of the Index. Initially, the advisors of the Congregation hesitated to put Vossius' treatise on the Index. Two decades later, however, Vossius was drawn into a debate about the status of the biblical text provoked by the heterodox French Oratorian Richard Simon (1638–1712). Vossius' works were reexamined and many of them were put on the Index in 1686.

The English, too, were interested in Vossius' response to Richard Simon, and opinion was divided over the viability of his views. A young scholar from Oxford, Humphrey Hody (1659–1707), showed that the evidence on which the authority of the Septuagint relied, the *Letter of Aristeas*, was a fraud. He did so by wielding the same kind of philological weapons with which Vossius' forebears, Casaubon and Scaliger, had dethroned Hermes Trismegistus and Dionysius the Areopagite.

Vossius' emigration to England did not follow as naturally from his dealings with the Septuagint as one might believe. There was an entire decade between the publication of De vera aetate mundi in 1659 and his settling in England in 1670. In this period, Vossius mainly looked towards France, not England. As in England, certain men in France were interested in Vossius because of the potential practical benefits which his erudition promised to bring to fruition. Eric Jorink gives a tentative description and analysis of this lacuna in Vossius' intellectual biography, arguing that Vossius, after his troublesome departure from Stockholm, felt the need to re-invent himself, and was challenged by the prospects of the New Philosophy. No longer choosing Scaliger and Saumaise as his models, he now directed his arrows at René Descartes. Within a few years, Vossius transformed himself from a silent librarian into a 'clear and present' philosopher, comparable to Descartes and Christiaan Huygens. Despite Vossius' mockery of Descartes' sometimes all-too detailed explanatory models, the conceptual and epistemological frameworks of the two had more in common than may appear at first sight. Among other things, both agreed that nature was uniform and stable. With Huygens, and like him the son of a famous scholar, Vossius shared the intellectual background of the Dutch mercantile élite, fascinated by natural philosophy and natural history, as well as by religious questions. From around 1660 on, Huygens and Vossius moved in the same scientific communities in France and England, and Jorink describes how both found favour with the French king. Huygens' inclination towards a mathematical description of natural processes tallied nicely with Colbert's pragmatic agenda for the Académie Royale des Sciences – as well as with the twentieth-century concept of the 'scientific revolution'. By contrast, Vossius' much broader spectrum of knowledge was less easy to value, both for the French court as for later historians. Consciously or not, Vossius kept irritating his French beneficiaries by providing them not with commercially useful information but with dedications of books and exquisite gifts of manuscripts. The curious world of his Dutch friends and the Royal Society was much more his natural habitat.

Fokko Jan Dijksterhuis elaborates on Vossius' role in the 'scientific revolution' in more detail, focusing on the development of his optics between 1658 and 1666. Due to the preoccupation of historians of science with tracing early forms of mathematical physics in seventeenth-century natural philosophy, much emphasis has been laid on the optics of Johannes Kepler (1571-1630), Descartes and Huygens. Although well known and much debated at the time, Vossius' optics have thus far attracted little or no attention, save for a footnote mentioning that he was the first to publish Snellius' sine law of refraction. Basing himself on Vossius' published works as well as unpublished correspondence with Pierre-Daniel Huet (1630-1721), Dijksterhuis shows that Vossius was essentially dealing with the same set of questions raised by Kepler, Descartes and Huygens, but arrived at different answers. Starting with an eight-page comment on a curious optical phenomenon described by Pomponius Mela in his Chorographia (first century AD), Vossius developed a sensible and advanced optical theory which confronted the main issues at stake in the seventeenth-century revolution in natural philosophy: the questions of substance, cosmology and epistemology. Dijksterhuis argues that Vossius' publication of Snellius' law should only be partly understood from his anti-Cartesianism. This law, buried in Snellius' manuscripts which Vossius studied in 1660-1661, buttressed his own optical theory. It was essentially a theory of sight, rather than of *light*. This perceptual line of reasoning, which had its origin in the medieval works by Alhacen and Witelo, and which would gain new popularity in the eighteenth and nineteenth centuries, via, for instance, Goethe's Farbenlehre, did not fit the successful approach of the Huygenses and Newtons. But, as Dijksterhuis concludes, seen from a contemporary point of view, Vossius' elaborate theory made sense, and he was regarded a learned, albeit rather pretentious optician by many of his peers.

As Karel Davids demonstrates, we witness a similar pattern in the work for which Vossius was most renowned in his own day, namely his geography. Geography was a life-long passion for Vossius, and gained him recognition as well as financial reward by the States of Holland, Louis XIV and Charles II. Vossius' first published work was an annotated edition of the *Periplus* by Scylax of Caryanda (third century BC), and one of his last

works dealt with determining longitude at sea. Vossius' intended edition of Ptolemy's Geographia was never completed, but not – as has been suggested – because Vossius lacked the necessary mathematical skills. Davids demonstrates that around 1660 Vossius' geographical studies took a different turn: from textual editions and commentaries into independent studies devoted to specific topics such as *De motu marium et ventorum liber* and De Nili origine, Davids detects the same characteristics that Jorink and Dijksterhuis noted in Vossius' other scientific works: an outright challenge to Cartesian ideas. However, contrary to his other works, Vossius' geography was hardly controversial. Davids draws attention to Vossius' financial position, and notes that his geographical works were cast in the idiom used between patrons and clients. Besides members of the Republic of Letters and potential patrons, Davids distinguishes a third category of intended readers: the seafarers and other common users. Here, the rather ambivalent nature of Vossius' work on geography and nautical issues comes to the surface: his attitude towards empiricism. On the one hand, Vossius kept checking and double-checking the information of ancient sources against the latest information provided by his impressive world-wide network of informants. On the other hand, as Davids notes, he remained basically an armchair-traveller. Contrary to his work on optics, Vossius made hardly any observations himself. He was very much aware of the first-hand information brought in by Jesuits such as Pero Paes (1564-1622) or Martino Martini (1614-1661) and had their latest publications in his library. But he did not travel himself. As Davids concludes, Vossius' accomplishments fell short of his ambitions, and his influence was much more limited than he would wish: 'As a geographer, Vossius forever lingered in the shadow of Jesuits'.15

The Jesuits also play an important role in Thijs Weststijn's lavishly illustrated contribution on Vossius' fascination for China. The publication of works by Martino Martini made a deep impression in Europe. It was not only other Jesuits, such as the omnipresent Kircher, who were fascinated by this ancient empire. The influx of information, texts, drawings and objects by the Jesuit missionaries and the VOC aroused the attention of Vossius and his friends. While in his contribution to the present volume, Grafton demonstrates the profound impact of Martini's work on Vossius' chronology, Weststeijn analyses Vossius' unrivalled admiration for all aspects of China's history and culture. It was in this context, Weststeijn notes, that

¹⁵ See Davids, below, 206.

Charles II should have made his famous remark on Vossius alleged credulity. According to Vossius, Chinese politics, arts, medicine and navigation surpassed everything known in Europe. He concluded that China was an improved version of Plato's ideal realm of the philosopher-king. Weststeijn devotes a section to Vossius' ideas on Chinese visual art. From his utopian outlook he praised Chinese architecture, sculpture and, above all, painting. Here, again, Vossius challenged received opinions. According to Weststeijn, Vossius' praise of the Chinese 'art of the brush' was unique for the time, directed against contemporary art theory in general, and critics of the supposedly primitive Chinese paintings in particular. Weststeijn demonstrates how Vossius' praise must be interpreted from the perspective of contemporary discourse: the debate on a universal language. Many scholars speculated about the possibility of meta-linguistic communication by means of images, which explains the seventeenth-century fascination for hieroglyphs and Chinese characters, thought to represent the essence of things natural. These were considered the silent remains of the perfect and complete knowledge before God gave man the Hebrew script. Weststeijn demonstrates how the contemporary debate about the proto-Christian origin of all religions clarifies Vossius' interest in Chinese art and language, and how it was intertwined with his biblical criticism, as well as his work on the Sibylline oracles and, with some justice, gained him his reputation as a freethinker. Vossius endorsed the idea that the specific nature of the Chinese characters guaranteed an antediluvian tradition of knowledge - although he did not make explicit the obvious conclusion that God had spoken to man in Chinese.

Colette Nativel explores another facet of Vossius' idiosyncratic method. Two texts, published in 1685, were to be posthumously reprinted a dozen years later by Johannes Georgius Graevius in his monumental *Thesaurus antiquitatum Romanarum*. The *Variarum observationum liber* of 1685 which first printed the texts, placed them in a series of digressions which at first sight appear to have little in common, but which develop from one another, revealing a deeper unity. A second part of the *Variarum observationum liber* consists of Vossius' biblical criticism. Nativel shows how Vossius combined a historicizing textual criticism with mathematical calculation and a comparative method. Vossius' reckoning was misguided, but, as is underscored as well in the articles by Van Miert, Grafton and Jorink, he combined various methods. The antiquarian Graevius recognized Vossius' attempt to come to a rational reconstruction of an aspect of ancient Rome. Vossius' methods of calculating remained a point of reference in the eighteenth-century debate of the depopulation of the world, from Montesquieu to Gibbon,

even if he was consistently refuted. Vossius' conclusions, although they were extraordinary, were thought serious enough to merit refutation and were thus integrated into the standard discourse. In the discussion on the size of ancient Rome, Vossius' name was often coupled to that of a humanist and antiquarian now perceived as a much more serious scholar than Vossius: Justus Lipsius (1547–1606). But Vossius was only partly indebted to the tradition of classical philology which informed the work of Lipsius, Casaubon and Scaliger. As Van Miert, Grafton, Mandelbrote and Nativel show, he did not wield the same sharp tools of philology as his intellectual 'grandparents' had done. Vossius carried that tradition with him, but his interests were broader: antiquarian questions, scientific problems, biblical criticism, and geographical, mechanical, and hydrographical subjects, sometimes treated in comparison with knowledge from other cultures and traditions, all featured on Vossius' intellectual map.

When studying Vossius, we should always keep in mind one thing in particular: his library. Vossius lived for, in and from his library. He cherished it, and he used it for his studies, but he also kept it as a source of capital. The Vossius collection, now in Leiden, is famous for its great quantity of rare manuscripts and fine prints. However, another aspect of this collection has become increasingly important as the centuries passed: the physical aspects of the books and their manuscript annotations provide information about the reading practices of Isaac Vossius and others, and how these previous owners may have associated with one another. To give an impression of the kinds of details that could be found in and on the remaining books from Vossius' library, Susan Derksen examined several printed books that may have been used by Vossius while he was writing his De vera aetate mundi and afterwards for later works on chronology and translation such as De Septuaginta interpretibus. Among the results of this research were not only many books containing scholarly annotations, such as seven copies of the works of Flavius Josephus, but also a copy of the *Praeadamitae*, in the margins of which Vossius wrote his comments on La Peyrère's theories. Although Vossius never published a full refutation of the Praeadamitae, these annotations seem to give us a preview of the arguments he would use against some of La Peyrère's ideas.

Astrid Balsem, in her contribution on Vossius' library, claims that Vossius' collection of books and manuscripts at some point must have been about twice as large as the collection which found its way into the University Library of Leiden in 1690. We already knew that Vossius sold part of his library in 1656 under his father's name, but Balsem has discovered that Isaac Vossius organised a second auction in 1666, and that he made plans for a third and perhaps even a fourth auction. Vossius 'not

only relished his library as a laboratory for his scholarly work and publications', but also 'managed to sell at a profit some of the treasures'. In fact, Vossius 'was never a bibliophile in the modern sense of the word.' Buying and selling books was not only a labour of love for him, but also something of a private commercial activity. In 1664, he congratulated himself on managing to buy books in Paris far below the Dutch market prices. Two years later in his sale catalogue, he keenly advertised many of the individual books and manuscripts on offer, praising their singularity, beauty and importance. At least some of the books he bought cheaply in Paris would have been on offer in 1666. Vossius was, in other words, a learned bookseller who commercialized the trade.

It may be concluded that in order to make sense of Vossius' buying and selling of books, we should regard him not as a mere thinker and intellectual, but as a man who liked to make money out of selling books. He was not only an author of treatises which challenged the learned world, but also a mundane scholar. He sought for patronage with no strings attached, and if times were difficult, because of a lack of financial resources or simply of storage space, he was willing to cash in on his library as a source of revenue. He often had to compromise his inclination for independence, but never did so completely. His works should be studied in the light of the tension between his subversive character and his need to make a living on his scholarly abilities. To this end, he was ultimately successful: he retained his intellectual freedom to engage in whatever he happened to stumble across, while at the same time regarded as a 'prince in the Republic of Letters' in the second half of the seventeenth century.¹⁷

All the contributions to this volume underscore the importance of two types of contexts: a biographical, personal one, and an intellectual, religious and political one. If Vossius liked to challenge his contemporaries, our challenge is to study how they responded, and how well. Vossius' life and works open up a fascinating world of difficult individuals, communities of discourse, religious politics, scientific discovery, fierce epistemological debates, academic competition, commercial trade, political antagonism, slander and gossip – in other words, the full spectrum of the learned world of Europe in the second half of the seventeenth century, much of which has sadly been written out of the history of both scholarship and science.

¹⁶ See Balsem, below, 296.

¹⁷ See Mandelbrote, below, 86.

THE FRENCH CONNECTION: FROM CASAUBON AND SCALIGER, VIA SAUMAISE, TO ISAAC VOSSIUS

Dirk van Miert*

Introduction: Shared Biographical Patterns

This essay will mainly deal with the intellectual roots of Isaac Vossius' ideas, by comparing the scope of his works with that of his teacher (Claude Saumaise, 1588–1653) and that of his teacher's teachers, Isaac Casaubon (1559–1614) and Joseph Scaliger (1540–1609). As an introduction to the protagonists of this story, however, it is worthwhile to draw attention to some biographical patterns, shared by all of them.

On 25 July 1593, Joseph Scaliger, who was then about to set off for Holland, wrote his last letter from France, which he signed: 'ce dimanche 25 du mois que le Roi est allé à la messe'.¹ In 1593, in the final phase of civil wars in France, Henry of Navarre, leader of the Protestants and sole heir to the throne of France, converted to Catholicism to secure the French Crown. Although there was an influential group of French Catholic scholars who argued for religious freedom for Huguenots, leading to the Edict of Nantes in 1598, the Huguenot scholar Joseph Scaliger left his home country and came to Leiden, where he expected to enjoy more intellectual and financial freedom than he would have in France.²

In Leiden, Scaliger was to function as the equivalent of today's research professor: he had no teaching obligations, and administration was kept to a minimum. He would single out the most talented Leiden students and receive them at his dinner table in leisurely tutorials. He also came into epistolary contact with Isaac Casaubon, the man he respected most in the

^{*} I thank Eric Jorink and Astrid Balsem for their remarks and am very grateful to Scott Mandelbrote for correcting my English. I myself am responsible for any remaining flaws.

¹ Scaliger to Pierre Pithou, 25 July 1593 (PBnF, Ms. Coll. Dupuy, 496, fol. 195^r (autograph); printed in Scaliger, *Lettres françaises inédites*, no. 99, 297–298).

² On Joseph Scaliger, see Grafton, *Joseph Scaliger*, ² vols. For more bibliographical information, see Grafton and De Jonge, *Scaliger*. *A Bibliography*. For some additions, see the contributions in Hoftijzer, ed., *Adelaar in de wolken*. More recent titles appear in the bibliography in Scaliger, *Correspondence* I.

world of the living. Casaubon was a Huguenot scholar just like Scaliger. But Casaubon remained in France, and spent the first decade of the seventeenth century in Paris.³ There he tutored Claude Saumaise, the precocious son of a Catholic magistrate. He sent him to Heidelberg to work in the Library of the Elector Palatine. In Heidelberg, Saumaise converted to Calvinism, the faith of his mother, and he started a correspondence with Joseph Scaliger about the important manuscripts which he uncovered in the library.⁴

Twenty years later, it was to be Saumaise who was called from France to Leiden to take the throne of Scaliger, which had been kept warm by his compatriot André Rivet (1572–1651) and by Gerardus Joannes Vossius (1577-1649). It was in Leiden that Saumaise came into contact with Isaac Vossius. A familiar pattern evolved: just as Casaubon and Scaliger had once instructed Saumaise, he in turn would now instruct the young Isaac on matters scholarly. Isaac was often to be found within the walls of the house of Saumaise, who would receive at home the choicest of the Leiden students, just as Scaliger had done. Saumaise passed on to him some of the manuscript copies he had made in Heidelberg as a young man and Isaac embarked on his Grand Tour through England, France and Italy to do exactly what Saumaise had done: copy out manuscripts.⁵ During this period of formation, Isaac basically inherited the complete French network of Saumaise, and even that of Scaliger and Casaubon, which included Claude Sarrau (ca. 1600–1651), Rivet, Nicolas Rigault (1577–1654), Alexander Morus (1616–1670), the sons of Claude Dupuy (1545–1594) and the sons of Jacques-Auguste de Thou (1553–1617). On the biographical level, then, there is clear French pedigree in the formation of Isaac Vossius.

³ On Isaac Casaubon, see the monumental biography by Pattison, *Isaac Casaubon* (and the comments on Pattison's interpretation in the preface to Grafton, *Worlds Made by Words*); Grafton and Weinberg, *I have always loved the Holy Tongue'*; Grafton, 'Protestant versus Prophet'; Van Miert, 'The Limits of Transconfessional Contact in the Republic of Letters'; Van Miert, 'Isaac Casaubon'.

⁴ On Saumaise's activities in Heidelberg, see Van Miert 'Scaliger, Saumaise, Casaubon and the *Palatine Anthology*'. On Saumaise in general, see Ter Horst, *Vossius en Salmasius*; Zuber, 'De Scaliger à Saumaise'; Leroy and Bots, eds, *Claude Saumaise et André Rivet*. See also the pages dedicated to Saumaise in Blok, *Vossius and his Circle*, 27–45, 344–350 and *passim*. Pfeiffer, *History of Classical Scholarship*, 122, writes that Saumaise 'spent his early youth in Paris under Scaliger and Casaubon' (but Scaliger never tutored Saumaise in Paris) and that he moved to Heidelberg from Paris in 1607, whereas Saumaise's first letter from Heidelberg dates from 4 October 1606 (LBL, Ms. Burney 366, fol. 29^r).

 $^{^{5}}$ See Blok, *Vossius and his Circle*, $75\!-\!196;$ Blok and Rademaker, 'Isaac Vossius' Grand Tour'.

But the French connection is also visible on a more personal field. Scaliger, Saumaise and Vossius shared a certain characteristic: a mind prone to the controversial. Scaliger and Saumaise both claimed to be of noble descent. When Saumaise entered Leiden in 1631, the protocol of reception mirrored the one which Scaliger had enjoyed. Like Scaliger, he had no teaching obligation. Their aristocratic self-conception probably contributed to their self-confidence, which appears from the quick and direct way in which they handled philological problems. Isaac Vossius had no claims to nobility, although of all these three, he would be the one who enjoyed greatest intimacy with the monarchs of his time. None of the three scholars fostered much interest in discussions about dogmatic theology. Instead, they focussed on matters philological.

This contribution aims to trace the philological tradition to which Isaac Vossius adhered, by means of what I would like to call a professional family tree: Vossius was the intellectual grandson of Joseph Scaliger, and to a lesser extent, of Isaac Casaubon. His intellectual father was not so much Gerardus Joannes Vossius, as one might expect, but another pupil of Scaliger: his delayed successor Claude Saumaise.

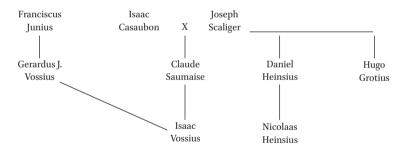


Fig. 1. Intellectual family tree of philologists on Dutch soil, first half of the 17th century.

⁶ See Van Miert, 'Scaliger Scatologus'. For Saumaise, see Blok, *Isaac Vossius and his Circle*, 36–38.

⁷ Zuber, 'De Scaliger à Saumaise', 467, stresses, correctly, I think, the importance of the eagle's eye as a prime characteristic of the noble genius. See also my 'Scaliger Scatologus', 24–26. Scaliger was pleased with Lipsius' portrayal of him as an 'aquila in nubibus', an 'eagle high in the sky'. See Hoftijzer, ed., *Adelaar in de Wolken*.

The idea underlying this family tree is that Isaac Vossius first of all inherited the philological methodology of Casaubon, Scaliger and Saumaise, that is: an interest in editions on the basis of a type research on manuscripts which would later, through scholars like Karl Lachmann (1793–1851) come to be known as 'stemmatic'. Secondly, Vossius also inherited their fields of interest: a youthful interest in poetry, gradually giving way to more peripheral genres: geography and chronology. It was this tradition of philology, which focussed on technical texts, this 'Scaliger school', that laid the basis for Vossius' later interests in scientific subjects. In order to substantiate these ideas, I shall make clear how much Vossius was indebted to his intellectual ancestors in each of the genres mentioned.

Poetry

It should be mentioned first of all that none of our four scholars fostered a particular predilection for verse composition. Of the four, Scaliger seemed most interested in writing poetry. Scaliger made his name as a specialist in archaic Latin verse. He made a Latin translation of Lycophron's *Cassandra*, he translated Sophocles' *Oedipus* and *Aiax*, numerous poems from the Greek Anthology, and the *Hymns* attributed to Orpheus. He also produced a large body of Greek verse, including metrical Greek translations of a good number of Latin poems, including work from Martial, Virgil, Horace, the elegiac poets, the *Sententiae* of Publilius Syrus, and the *Disticha Catonis*.8

Scaliger edited Ausonius, Catullus, the *Appendix Vergiliana* and Manilius.⁹ He left it to Janus Gruter (1560–1627) and Petrus Scriverius (1576–1660) to prepare an edition of Martial, and to Saumaise to edit the *Palatine Anthology*.¹⁰ Scaliger's edition of Manilius may have been triggered rather by the difficulty of the material than by the poetical quality of the work: first and foremost, he wanted to establish a correct text, and in the process, he found out how much or how little Manilius knew about astronomy.¹¹ Throughout his life, he responded to requests for poems. However, Scaliger produced little original lyrical poetry (his ode to Verona is a rare example) and no epic poetry (although some of his funeral poetry is very

⁸ Scaliger, Poemata omnia.

⁹ See the bibliography.

¹⁰ See Van Miert, 'Scaliger, Saumaise, Casaubon and the *Palatine Anthology*'.

¹¹ Grafton, Joseph Scaliger I, 201.

lengthy). 12 Scaliger was never a lyrical poet like his father Julius Caesar Scaliger (1484–1558), or his close friends Janus Dousa (1545–1604) and Daniel Heinsius (1580–1655). In fact, in the last years of his life, he grew reluctant to write poetry, wondering why people thought him a poet at all. You should know that I do nothing more reluctantly than being forced to participate, out of respect for friendship, in the old game of poetry'. 13

Writing poetry and posing as a poet were also not among the first concerns of Isaac Casaubon. Casaubon wrote a treatise on comic literature and made an edition of and commentary on Theocritus (the notes on Theocritus were edited together with those of Scaliger on the same poet). He produced some original poetry, but his poems were never brought together during his lifetime. Most of it is liminary poetry in Greek.

Scaliger's and Casaubon's student Saumaise was even less interested in poetry: he recognized the importance of the *Palatine Anthology*, but his interest lay in rather more remote, antiquarian areas. 'I have never been a poet', he acknowledged.¹⁵

Still less so was Isaac Vossius: Blok listed no more than three poems from his hand, although he, too, had studied the Greek Anthology, and also the Latin poets Martial and Catullus. His activity as an editor of poetry was, as with Scaliger and Saumaise, limited to the first half of his life. All of our four philologists, then, were not primarily poets in the active

¹² On Scaliger's poetry, see Van Miert 'Scaliger'.

¹³ Scaliger to Scipio Gentilis, 17 March 1605: 'Nam quod versiculos a nobis exigis, vereor ut hoc sit ex dignitate si aetatem spectes, aut ex amicitia si non omnia tua causa velim. Nam in hac senectute versus facere est insanire, amico vero aliquid negare est pietatem laedere. *Scito ergo me nihil magis invitum facere quam quum reverentia amicitiae in veterem ludum poetices me includere cogor.* Et miror quare amici hanc operam a me exigant qui nullum bonum versiculum mihi imputare possunt. Quis illis persuasit me poetam esse? Non expectandus est obtrectator qui mea poematia damnet. Ego primus illa traduco et conspuo. Ne quid tamen horum ea caussa me dixisse putes ut hoc onus defugiam, accipe quae nunc e lectulo surgenti mihi exciderunt, ut, si tibi placent, utaris; sin autem, ut eorum culpam in te conferas, qui invitum delirare cogis' (printed in Crenius, *Animadversiones* VI, 18–19; Gudius, *Epistolae* I, no. 25, 355–356, my italics).

¹⁴ Casaubon, De satyrica poesi; Theocritus, Idyllia.

¹⁵ Saumaise to J. Dupuy, 22 August 1652: 'Vous scaves que je nai jamais este poete' (PBnF, Ms. Coll. Dupuy 789, fol. 293^r, as cited by Blok, *Isaac Vossius and his Circle*, 30, n. 6).

¹⁶ Blok, *Isaac Vossius and his Circle*, 51. Vossius criticised Johannes Fredericus Gronovius for wasting his time on the medieval poet Aldhelm: see Vossius to N. Heinsius, 12 July 1651: 'Gronovium se iterum accinxisse ad meliorum autorum emendationem ex animo gaudeo. Nam certe Aldhelmus iste, aliique huiuscemodi versificatores, non merentur, ut in iis tempus terat, quod multo dignius possit collocare' (Burmannus, *Sylloge* III, 619).

sense, and over the generations, gradually even less so. Perhaps they were rather more 'scholars' than 'humanists'.¹7

The Greek Anthology

When Scaliger was in France, he would teach one of his friends by having him translate poems from the Greek Anthology into Latin, a standard humanist training technique. In the evening, Scaliger would orally translate verbatim a poem of the Greek Anthology for François Vertunien (d. 1607), on the basis of which Vertunien then had to make a Latin verse translation. After long hours of lucubration, he would submit his translation in the morning to Scaliger, who had made his own translation in his head immediately after waking up. 18

Isaac Casaubon, too, was intrigued by the Greek Anthology. His fatherin-law, Henricus Stephanus (Henri II Estienne, 1528–1598), had produced an edition of the text in 1566. Thirty years later, Casaubon published his edition of Theocritus, interestingly enough on the basis of manuscripts from the Bibliotheca Palatina in Heidelberg. Both Scaliger and Casaubon stood in epistolary contact with the librarian of that library, Fredericus Sylburgius (1536–1596), who died early in 1596.¹⁹ Both Casaubon and Scaliger were aware that the Heidelberg library contained many treasures as yet unexplored. When Casaubon sent Saumaise to Heidelberg, he was thrilled to receive a letter from his student, informing him of the discovery of a certain manuscript of the Greek Anthology, which contained more poems and was of better quality than the well known Anthologia Planudea: the anthology as organised by the Byzantine monk Maximus Planudes at the beginning of the fourteenth century.²⁰ Casaubon informed Scaliger about the discovery, and Saumaise felt confident enough to write to Scaliger himself.²¹ A correspondence ensued over the next year and a half, in which Saumaise sent his transcriptions of the manuscript to Scaliger,

¹⁷ For this interesting dichotomy, see Levine, 'Strife in the Republic of Letters'.

¹⁸ Hawkins, 'Friendship of Scaliger and Vertunien', 130; On Scaliger's involvement with the Greek Anthology, see Hutton, *Greek Anthology*, 152–157.

¹⁹ See the lemma on Sylburgius in *Allgemeine Deutsche Biographie* 37, 282–285.

²⁰ Saumaise to Casaubon, 5 January 1607 (LBL, Ms. Burney 366, fol. 32^r).

²¹ Casaubon to Scaliger, 15 February 1607: 'Est alius quidam iuvenis Divionensis, Salmasius, ad miraculum doctus, qui Heidelbergae in Bibliotheca Palatina cum alios ingentes thesauros reperit, tum quoque Agathianam ἔκδοσιν τοῦ τῶν ἐπιγραμμάτων κύκλου, ubi multae latent Graecanicae Musae delicatissimae deliciae, sed et nequitiae. Egi statim cum ipso, ut editionem procuraret τῶν ἀνεκδότων.' (Casaubon, *Epistolae*, 284); cf. Saumaise (Heidelberg) to Scaliger (Leiden), second half March 1607 (LBL, Ms. Harley 4935, fol. 105°).

who would correct them and return them, with good advice on how to publish the new manuscript. But unfortunately, the project never came to fruition: the manuscript posed too many problems for the twenty-yearold, and although Saumaise was able to borrow the manuscript later in life for two years, he still was not able to solve his difficulties with it, for lack of time, talent or resources. When the Palatine Library was taken to Rome in 1623, all hope for an edition was lost. 22 But Saumaise kept his own manuscript, known to his colleagues as the 'Anthologia inedita', and he would share it with Isaac Vossius, at the time when Vossius was negotiating with the Amsterdam printers Willem Jansz Blaeu (1571–1638) and his son Joan Blaeu (1596–1673) on behalf of Hugo Grotius (1583–1645), for the printing of Grotius' edition of the Greek Anthology. These dealings also came to naught, but when Isaac returned from his period abroad in 1644, Grotius had new hope.²³ Grotius' text was based on the standard version of the Greek Anthology, the Anthologia Planudea. Against this background, one small remark in a letter from Vossius to Saumaise of 1638 acquires greater significance: he writes that he has seen the Greek text of Grotius' edition, but that it was in no aspect *larger*.²⁴ Larger than what? The word Vossius uses is 'auctior', the regular word to indicate that a book is enlarged or expanded as compared to a previous edition. But in this context, it could well mean that Vossius meant that Grotius' edition was not larger than the Palatine Anthology, in which case Vossius must have had access to Saumaise's copy of the Palatine Anthology already in 1638. We know for sure that Saumaise in 1648 actually lent out his copy of the work to Isaac Vossius. Vossius may have made his copy of the Palatine Anthology (which has become known as the 'Vossianus') at that time, based on Saumaise's manuscript.²⁵ Vossius himself must have realised that the copy of

²² On Scaliger, Casaubon, Saumaise and their discussions of the Palatine Anthology, see Van Miert, 'Scaliger, Saumaise, Casaubon and the *Palatine Anthology*'.

²³ See Blok, Isaac Vossius and his Circle, 222-228.

²⁴ I. Vossius to Saumaise, 16 June 1638: 'Anthologiam Graecorum Epigrammatum Hugonis Grotii hic [in Amsterdam] habemus, quae propediem praelo, ut speramus, subicietur. Nulla in parte auctior est, nisi quod versio Latina et lectiones marginales accedant. Adiunctus est libellus epigrammatum ex inscriptionibus Gruteri' (PBnF, Ms. Cod. Paris. Lat. 8596, fol. 8, as cited by Ter Horst, *Vossius en Salmasius*, 33). The 'lectiones marginales' may refer to alternative readings provided to Grotius by Saumaise himself; for Grotius' request to do so, see his letter to Saumaise, 11 June 1635 (in Grotius, *Briefwisseling* VI, no. 2142, 22–23).

²⁵ According to Vossius' friend Paul Colomiès (1638–1692; for their relations, see Van Miert, 'Een kijkje in de keuken'), the *Vossianus* had been made by Sylburgius, the great co-operator of the Heidelberg press of Hieronymus Commelin who had spent much time in the Bibliotheca Palatina before he died in 1596. This would imply that the *Vossianus* preceded Saumaise's

the Palatine Anthology which he now had was too deformed to be able to produce an edition from. His interest in the work is underscored by the fact that he owned a copy of the *Anthologia Planudea* in the edition of Henricus Stephanus, 'with notes of a learned man'.²⁶ In short, Vossius inherited Saumaise's interest in the Greek Anthology, which Saumaise in turn had developed with the help of Casaubon and Scaliger.

Martial

When in France, Scaliger had spent some time in the house of the French scholar Jacques Cujas. He admired Cujas' collection of manuscripts, and

faulty transcription. The Vossianus, however, was hardly cleaner. Vossius brought it to England, where it was transcribed again: it was this transcription, a grandson of the original, which was used by Richard Bentley. Morever, to quote Hutton, 'The Vossianus was the source of most of the knowledge of the new Anthology possessed by scholars of the Netherlands and of England in the seventeenth and eighteenth centuries.' (Hutton, The Greek Anthology, 9). Hutton warns that Colomiès is not always to be trusted, so it might not be true that the Vossianus was copied out by Sylburgius. Sylburgius is never mentioned in relation with the Anthology. Nicolaas Heinsius may also have seen the Vossianus, for when he in 1652 wrote that a German scholar, Lucas Langermann (1625–1686), wanted to get access to the Vatican library to work on the Palatine Anthology, Heinsius wrote that Saumaise's version contained gross errors; see N. Heinsius to Vossius, 17 December 1652: 'Langermannus Romam profectus est, ut Anthologiam absolvat. Sed omnia illic invenit difficilia aditu et occlusa, cum novus Vaticanae sit custos datus, altero viro optimo et humanissimo nuper e vivis sublato.... Prodigiosos errores, quos in *Anthologia* describenda commisit [sc. Salmasius] aliquando videbis, ubi redierimus ego et Langermannus. Certe negligi a te non debet praeclarum eius furtum, quo Scholiastem Palatinum Ovi Simmiae miserrime Cyclopeo more devoravit totum, inque succum et sanguinem convertit. Dissimula tamen, quaeso, Langermannum de Anthologia cogitare, ne et eius fortunis insidietur. Quicquid enim de nobis fiet, e re nostra erit, aliquem in aulam illam irrepere, quo familiariter possimus uti' (Burmannus, Sylloge III, 655-656). Four scenario's are possible to explain Heinsius' familiarity with the errors in Saumaise's transcription: he could have known this from hearsay, from autopsy of Saumaise's own transcription (which is highly unlikely), from the Vossianus, on the assumption that the Vossianus accurately reflected Saumaise's transcription, the errors and cruces included; and, finally, Heinsius may have seen not the Vossianus, but the nice copy which Saumaise had made of his own apograph and which he offered to Christina of Sweden. See Blok, Isaac Vossius and his Circle, 347. Vossius had already, on 18 October 1652, responded to an earlier letter by Nicolaas, voicing his scepticism that Saumaise would ever complete his edition of the Anthology: 'De studiis Langermanni quod scribis gratum est. Quod autem vereatur ne Salmasius eum in edenda Anthologia praeveniat, id frustra veretur. Nunquam huic operi manum adhibebit' (Burmannus, Sylloge III, 648).

 26 Colomiès, $Opera,\,888,\,$ no. 34: 'cum viri docti notis'. This should be the copy today in LUB, shelfmark 756 D 11, which has various manuscript notes, perhaps by Ludovicus Carrion (whose name appears on a flyleaf). It has Vossius' printed ex libris 'Ex Bibliotheca Viri Illust. Isaaci Vossii' followed by the manually added number '11'. The University Library holds another copy of Stephanus' edition of 1566, shelfmark 756 D 9. This has notes by Scaliger and Daniel Heinsius, but if Colomiès had ever seen it, he would not have failed to recognize at least Scaliger's hand and mention his name, as he did on other occasions.

used several of these, including one of Martial and another with excerpts from Martial.²⁷ Much later, in 1607, a selection of poems from Martial, translated into Greek by Scaliger would be published by Isaac Casaubon.²⁸ Scaliger also read what others had to say about Martial. If he wanted to relax, he would pick up the Martial edition of the Parisian professor Theodorus Marcilius (1548–1617), which he found so ridiculous that he had to laugh.²⁹ He wrote a mocking refutation of the commentary, which was later printed in the 1619 edition of Martial prepared by Petrus Scriverius.³⁰ This posthumous Scriverius edition has a long history. Scaliger had acted as an intermediary between two subsequent editors of Martial: Janus Gruter, librarian of the Palatine Library in Heidelberg, and Scriverius. Gruter had produced an edition which relied on a manuscript from the Palatine Library. Scaliger at some point possessed notes on that same manuscript made by a friend of his.³¹ In 1602, the year that Gruter published his Martial, the first evidence appeared that an edition of the same work was being undertaken by Scriverius. The progress of this edition is mentioned on numerous occasions in the letters of Scaliger, who was annoyed that Scriverius was unable to complete it, while he, Scaliger, had made it known far and wide that the edition was underway. Scaliger eventually supported another of his correspondents, Carolus Labbaeus (1582-1657), in making an edition. In short: although Scaliger showed himself not terribly enthusiastic about Martial, he did expend quite a bit of energy on the Roman satirist, not least, I suspect, because he found congenial the way in which Martial sometimes lashed out against others.³² This Martial history does not involve Saumaise, but it does feature Isaac Vossius, who at some point decided to make an edition of Martial as well. On his Grand Tour, Vossius had been looking for, and actually found, new manuscripts of Martial. On his return, he addressed, from Amsterdam in

 $^{^{27}}$ See Scaliger to J. Gruterus, 9 June 1602 (Scaliger, Opuscula, 1612, 426–429, esp. 428; reprinted in Scaliger, $Epistolae\ omnes,$ 768–770, esp. 769).

²⁸ [Martialis], *Florilegium*.

²⁹ Scaliger to Casaubon, 18 December 1601: 'Quum animum remittere volo, assumo in manus scripta illius qui *Amphitheatrum* Martialis et Persium nuper κατακέχοδεν. Nam nunquam suavius rideo quam quum aliquid eius Lucumonis video.' (PBnF, Ms. Coll. Dupuy, 394 ter, fol. 43'; printed Scaliger, *Epistolae omnes*, 197–198, esp. 198)

³⁰ Martialis, ed. 1619.

³¹ Scaliger to Gruter, 9 June 1602: 'Scito autem ab amico olim mihi varias lectiones Martialis ex codice Palatino communicatas fuisse' (Scaliger, *Opuscula*, 1612, 426–429, esp. 428; Scaliger, *Epistola omnes*, 768–770, esp. 769).

 $^{^{32}}$ Des Maizeaux, ed., Scaligerana II, 119: 'Ego dico de Martiali quod ipse dixit de se ipso: "Sunt bona, sunt quaedam mediocra, sunt mala plura / quae legis, atque aliter non fit, Avite, liber." '

1645, a letter to Nicolaas Heinsius, then in Paris. In this letter, Vossius reported on his engagement with Martial. He had already abandoned the project four years before that. But now, if Heinsius would like to help him with it, Vossius offered him some advice: in Paris there were several manuscripts of Martial which Vossius had not collated. They included a manuscript in the Cabinet Dupuy, another with extracts from Martial in De Thou's library, and two manuscripts in the library of Alexandre Petau. Vossius displayed no regret about not having collated all of these manuscripts: he had merely seen them. He suspected that there might be other manuscripts to be found in the libraries of St. Victor, Richelieu, and in the Memmiana.³³ In the Ambrosiana in Milan, Vossius had seen three manuscripts of Martial, one of which was annotated by Niccolò Perotti. Vossius had, again, only consulted a few passages in it.³⁴ The only manuscript he collated in its entirety was kept in Florence. In reply, Heinsius sent him some corrections on Martial on the basis of his collations against a manuscript in the Vatican.³⁵ Heinsius' collations revived Vossius' interest in the project of a new edition: in 1652 he asked for more corrections, hoping to publish an edition in which he would offer emendations on a thousand passages.³⁶ Clearly then, Vossius wanted to use as many manuscripts for his Martial edition as possible, but he had not taken the time to collate them all when he himself was in France and Italy. Heinsius does not seem to have done so either: the only manuscript which we know with certainty to have been collated by him, was the one in the Vatican, and that was precisely the one of which he subsequently lost his collations. It is arguable that Vossius' interest in Martial stood in no direct relation

³³ I. Vossius to N. Heinsius, 26 November 1645 (Burmannus, Sylloge III, 562–563).

³⁴ I. Vossius to N. Heinsius, 4 April 1646 (Ibid., 565) and I. Vossius to N. Heinsius, 1 November 1647 (Ibid., 571–572).

³⁵ I. Vossius to N. Heinsius, 19 December 1646 (Ibid., 566); 8 March 1647 (Ibid., 568). Later on, this collation got lost: see I. Vossius to N. Heinsius, 1 November 1647 (Ibid., 571); 12 March 1648 (Ibid., 576); and 12 March 1648 (Ibid., 577).

³⁶ 12 December 1652 (Ibid., 659). The manuscript in the Vatican is an interesting case: Vossius may have thought that a manuscript formerly in the Palatine Library in Heidelberg was now kept in Rome: Janus Gruter had produced an edition of Martial in 1596, but, not content with the result (he was not the only one who was not) he prepared a second edition, which appeared in 1602. For this edition he made use of a manuscript in Palatine Library (BAV Pal.la. 1696) and of notes made on that manuscript by Richard Thomson. Thomson must have made these notes during his stay in Heidelberg, where he was for six months from October 1592 (personal communication of Dr Paul Botley (University of Warwick), who is currently doing research on Thomson). Vossius must have known about this manuscript. Perhaps Gruter had shown the codex to Saumaise, and Saumaise told Vossius about it.

with Scaliger's dealings with the poet. But it seems to fit into a pattern of shared sympathies. Far more explicit is the link between Scaliger and Vossius in the case of the latter's edition of Catullus.

Catullus

Joseph Scaliger produced two editions of Catullus, one in 1577 and one, slightly more elaborate, in 1600.37 Again, he had access to a manuscript of Catullus in the library of Jacques Cujas. He embarked on the enterprise in order to draw attention by editing a canonical poet and because he ventured to do something with this text that had not been done before: to emend the text in the style of the Italian scholar Pietro Vettori (1499-1585), that is by relying heavily on manuscript evidence. Scaliger invested a great deal of time in his project. Like others, he drew on Greek sources of inspiration for Catullus, but he left out the mainstream references and provided only recondite examples, which would be new to his readers. He also departed from the French tradition of emendation on the basis of literary and rhetorical considerations. His reliance on manuscript collations was a sound method, although the way he carried it out fell short of the standards set by Italian philologists such as Angelo Poliziano (1554–1594) and Vettori. Scaliger, moreover, was wrong to assert that the manuscript on which he had based his text was better than those which other editors had employed. But the idea itself was correct: he endeavoured to rely on a version as close as possible to the archetype. Also modelled on the Italian method was the validation of certain archaic spellings in his manuscript, by referring to parallels from epigraphy. On the other hand, Scaliger also tried to maintain the French method of approaching a text from a literary point of view, taking into account the style and rhetoric of the author. Moreover, he employed theories of letter-forms, deploying the understanding that transcription mistakes which are extant in all manuscripts might indicate that certain letters must have looked similar in the archetype. Thus, he was able to characterize the script of the archetype. This archetype was lost, but Scaliger supposed he was working on a manuscript which derived from it. He not only tried to establish relations between extant manuscripts, but also attempted to reconstruct lost ones. In this history, again we can bracket the role of Saumaise.

³⁷ The following paragraph is largely based on Grafton, Scaliger I, 161–179.

In Isaac Vossius' library, however, we encounter no less than six editions of Catullus, five of which contained collations of manuscripts, and one, the second edition of Catullus by Scaliger, with emendations and notes. Amongst the six copies is also Scaliger's first edition of Catullus. One of the collations, in a Plantin edition, is identified as having been made by Janus Gruter.³⁸

Vossius' own Catullus edition only came out in 1684.³⁹ It is a curious book. The first note comments on the first name of the author. Vossius criticised Joseph Scaliger for giving Catullus the first name 'Quintus' instead of 'Caius'.⁴⁰ But Vossius also tried to understand why Scaliger made this mistake: Scaliger had relied on the authority of a bad manuscript and on a passage in a poem of Catullus, where he thought 'Quinti' should be read for 'qui te'. Vossius refuted the manuscript, claiming that it was very recent and thus not authoritative, completely ignoring Scaliger's reasoning for his claim to be working from an old source.⁴¹ But Vossius also understood, and explained to the reader, how the error in Scaliger's manuscript might have come about: the copyist of Scaliger's codex thought that Caius Catullus was identical to the Quintus Catulus mentioned by Aulus Gellius. 'I do not think this escaped the attention of Scaliger, but he seems to have embraced a corrupt manuscript, which served to endorse his conjecture'.⁴²

³⁸ Colomiès, *Opera*, 891: 'No. 37: Catullus, Tibullus, Propertius, editionis Venetae cum mss collati.' 892: 'No. 47 Catullus, Tibullus, Propertius Scaligeri editionis secundae, cum emendationibus et notis.... No. 52: Catullus, Tibullus, Propertius edit. Plantini, cum mss collati, manu Gruteri.' 893: 'No. 82: Catullus etc. Scaligeri cum mss collati.' 894: 'No. 102: Catullus etc. Mureti viri doctissimi manu cum mss collati.' 895: 'No. 130: Catullus etc. Edit. Amst. Fr. Iunii Fr. F. manu cum mss collati.'

³⁹ The printer's preface claims the manuscript was more than thirty years old and was sent to him by a friend, who has been identified as Hadrianus Beverlandus; see De Smet, *Hadrianus Beverlandus*, 53. Had it been up to Vossius himself – the preface claims – the manuscript would have perished in the dark place where it had already begun to fall apart. Blok suggests this story was partly an excuse: Vossius anticipated a strongly negative response to his edition and now hid behind the identity of an anonymous friend. Indeed, it is a common place of editors to claim to be publishing their work against their will by referring to pressure from, usually anonymous, 'friends'. In this case, however, it does seem true that Vossius' engagement with Catullus dated from the early 1650s. But he clearly saw the edition through the press, for at one point he refers to his 'scriptum de septuaginta interpretibus', which must postdate the edition of his *De Septuaginta interpretibus* of 1661. Catullus, ed. Vossius, 3.

⁴⁰ Scaliger, Castigationes in Catullum, 3–4.

⁴¹ Scaliger, on the contrary, had claimed this manuscript was very old and the archetype of most of the manuscripts found on the Italian peninsula, the copyists of which nevertheless had trouble deciphering the Longobardic script.

⁴² Catullus, ed. Vossius, 1–2: "Cai" praenomen in "Quinti" mutavit vir summus Ios. Scaliger, tum quod sic scriptum invenerit in libro quodam Cuiacii, tum quoque autoritate

After thus accusing Scaliger of opportunism, Vossius supported his own notion by parallels from other authors: Apuleius in his *Apology* and Jerome in his *Chronicle*. This last remark was a brilliant blow against Scaliger: no one had studied Jerome's Latin translation of Eusebius' *Chronicle* more thoroughly than Scaliger himself. Indeed, in Scaliger's own edition of Jerome's translation, we find 'C. Valerius Catullus'. By 1600, when Scaliger's second edition of Catullus came out, he was already involved in studying this text: he should have known better.⁴³

Vossius' reasoning is sophisticated: he explains mistakes in a manuscript that he has not seen, he praises Scaliger, but accuses him indirectly of opportunism and reprimands him, even more indirectly, by referring to a parallel which Scaliger should have known better than anyone else. He also bluntly states that the manuscript used by Scaliger is very recent, ignoring Scaliger's statement that it was old enough to be the source of other manuscripts.

At the expense of the great Scaliger, Vossius boldly presents himself as more able to treat one of the best known Latin lyrical poets of antiquity. In fact, he put it even more explicitly in a letter to Nicolaas Heinsius, whom he asked to collate a Catullus manuscript. Isaac himself had already collated another such manuscript. 'I have emended that author in countless places, and as soon as I have the time, I will present a new edition, much better than that of Scaliger'.⁴⁴ His edition was thus directly inspired by Scaliger's.

ipsius Catulli, cuius versum carmine in Ianuam sic reformandum esse putabat: "Verum isti populo naenia, Quinte, facit". [Catullus, Carmina, 67.12] Neutra tamen hic succedit ratio. Versiculum enim hunc longe aliter legendum esse infra docebimus. Exemplar vero scriptum Cuiacianum cum recentissimum fuerit, tanti videri non debet, ut propterea in dubium vocentur testimonia Apuleii in Apologia priore [Apologia, par. 10; 11, line 26 in the Teubner edition by R. Helm, 1963], et Hieronymi in Chronico, qui "Caium", non "Quintum" appellant. [See Jerome's translation of Eusebius' Chronicle, in Scaliger, Thesaurus temporum, first page numbering, 150 (ad annum mundi MDCCCXXXXII): 'C. Valerius Catullus scriptor Lyricus Veronae nascitur']. Nec est obscura causa unde factum sit ut "Quintip praenomen in praedicto codice Catullo tribuatur. Quisquis nempe ille fuit qui codicem istum descripsit, is Quintum Catulum, cuius versus exstant apud Gellium [Gellius, Noctes Atticae, 19.9.13–14], et hunc nostrum Catullum eundem esse credidit. Non, ut puto, fugit hoc Scaligerum, sed vitiosam scripturam, adstruendae coniecturae suae idoneam, avide, ut videtur, est amplexus.'

⁴³ The earliest surviving evidence of Scaliger's involvement with Eusebius in his correspondence dates from 1600: On 17 July 1600, Scaliger asked Lipsius if he could borrow his manuscript of Eusebius (Lipsius *Epistolae* XIII, no. 2836, 188–189). On 31 December 1600 Isaac Casaubon wrote to Scaliger: 'Eusebium enim recoqui nunc a te, ex tuis ad amplissimum [Iacobum] Gillotum cognovimus' (Casaubon, *Epistolae*, no. 204, 104–105).

⁴⁴ I. Vossius to N. Heinsius, undated: Velim quoque cures conferri Catulli quoddam exemplar satis vetustum, nempe illud, in quo Catullus solus continetur. Alterum, quod et

There are many examples of Vossius' queer handling of the text.⁴⁵ But in spite of his bizarre changes at some places, he remained firmly grounded in manuscript evidence in the more probable readings he suggested – or at least he said that he did.

One is inclined to think that Isaac Vossius inherited his interest in manuscripts from his father, who spent, after all, most of his life practising philology. But there are two reasons to doubt this 'genetical' link. The first one is that the older Vossius constantly and consistently discouraged his son to spend his time on copying out manuscripts. The father wanted Isaac to study theology and law, which he valued higher than philology. This makes a striking difference with Scaliger's encouragement of the young Saumaise to copy out more and more things from the treasures of the Palatine Library. Isaac did not inherit his interest in manuscripts from his father. The output of the father and the son was rather dissimilar. Gerardus Joannes Vossius was predominantly a compiler: he published primarily compilations, overviews and schoolbooks. The son, on the contrary, was not encyclopaedic, but rather analytical, publishing short treatises on a variety of subjects. More surprisingly still: the old Vossius did not engage in textual editing, whereas the son produced a range of such editions and planned many more which never materialized. Whereas the father spent his life drawing maps and setting up signposts for others to find their way in the land of letters thus far discovered, the son preferred to explore unknown territories.

ipsum satis est bonum, ipse olim contuli. Innumeris locis auctorem illum emendavi, et ubi otium fuerit, novam eius dabo editionem, haud paulo meliorem ista Scaligeri' (Burmannus, *Sylloge* III, 632–633).

⁴⁵ In one instance (Carmen 1.2), Vossius endorses Scaliger's reading 'arida pumice' (although he does not mention Scaliger) for 'arido pumice', on the basis of an obvious remark in Servius. But he does not leave it at that: he continues to argue that a certain phrase 'putris pumex' in the *Priapeia* (sc. 32.7, a crux) is also to be taken feminine, as the metre demands that it be read as 'putra pumex'. And there are other adjectives in -is, which could also end in -us, just like 'putris/putrus'. Vossius' reasoning here is bizarre: first of all, the word 'puter', the masculine form, can indeed be used interchangeably with the masculine variant 'putris'. But there is no such form as 'putrus', neither a feminine form 'putra'. The feminine form of the adjective is 'putris'. To argue then that a particular phrase with 'putris' is feminine on the basis that the non-existant variant form of the adjective could not be masculine, is quite beside the point.

Prose

Geography

In 1587, Isaac Casaubon published an edition of Strabo, which was based, or so the title page claimed, on 'old manuscripts'. ⁴⁶ Two years later, in 1589, his notes on Dicaearchus' *Eclogue* appeared, printed together with a Latin translation and commentary on this geographical work of Dicaearchus, as edited by his father-in-law, the printer Henricus Stephanus. ⁴⁷ In 1600, the Augsburg scholar David Hoeschelius published a little book, containing various small texts of Greek geographers, including that of Dicaearchus, but also a text ascribed to Scylax of Caryanda. ⁴⁸ The preliminary material in Hoeschelius' edition contains two letters written to him on the subject: one from Casaubon and one from Scaliger.

When young Saumaise was working in the Palatine Library in Heidelberg, he came across a manuscript containing Greek geographical texts: he reported to Scaliger that he had translated the geographers which had been edited previously by Hoeschelius. Saumaise showed little appreciation for Hoeschelius' work: Hoeschelius' edition of the *Periplus* of Scylax of Caryanda was especially littered with mistakes. Saumaise complains that Hoeschelius limited himself to identifying dittographies and by ignoring other mistakes 'created a difficult job for me and easy glory for himself. I think I have done quite a job amending these authors'.⁴⁹ Hoeschelius' notes indeed were very limited: he only dedicated two and a half pages in octavo to textual-critical remarks. Saumaise, however, was often wrong

⁴⁶ See bibliography, under Strabo.

⁴⁷ Casaubon, *In Dicaearchi eclogen notae*, following page 128 of Dicaearchus, *Geographica quaedam*.

⁴⁸ Hoeschelius, ed., Geographica.

⁴⁹ Saumaise to Scaliger, 27 September 1607: De Stephano meo [Stephanus of Byzantium] urgendi potius οἱ τῶν τύπων γραφεῖς, quod genus hominum αὐθάδες καὶ αὐθέκαστον esse non ignoras. Vertimus illos scriptores γεωγραφούμενων ab Hoeschelio editos [D. Hoeschelius' edition of 1600], qui Stephani editionem nostram ornare possunt. Sed, Deus bone, quantam in illis mendorum molem deprehendimus, et praecipue in Scylace Caryandeno scriptore vetustissimo et optimo! Doctissimus Hoeschelius τὰ διττογραφούμενα tantum annotasse contentus, nobis non levem laborem, sibi levem gloriam peperit. In iis restituendis non parum videmur praestitisse, quod aliis occupatus praestare non potuit vim doctissimus et diligentissimus. Si quae nunc meae curae sint cupis cognoscere, fabulam Ismenis in manibus habemus, quam vertendam suscepimus. Gaudebit eadem liberalitate nostra Cyrus Prodromus, cuius libros octo de amoribus Rhodanthes et Dosiclis felicissime ex membranaceo situ et pulvere eruimus, quod te nescire noluimus' (LBL, Ms. Harl. 4935, fol. 103^{r-v}; olim fol. 107^{r-v}).

himself and never came round to producing a better text. Saumaise remained interested in the subject: he copied out a Palatine manuscript of another, anonymous, *Periplus*. His edition of Julius Solinus gave voice to his sustained interest in geography.⁵⁰ Moreover, he managed to instil this interest in Isaac Vossius, to whom he passed on the anonymous *Periplus*. 51 It was to be included in Isaac's first publication.⁵² Vossius gave ample proof of his debt to Saumaise in his edition of the Peripluses of Scylax and the anonymous author: while Hoeschelius was often criticized, emendations by 'the great Saumaise', 'the incomparable Saumaise', or 'Saumaise, the champion in every type of learning' were eagerly endorsed. But when he credited Saumaise with a correct conjecture, he did not always say that the conjecture had in fact already been suggested by Hoeschelius.⁵³ Vossius took over many of Hoeschelius' readings, and of the variant readings which Hoeschelius had found in a manuscript owned by the learned Augsburg statesman Johann Georg Herwart of Hohenburg (1553–1622),⁵⁴ but he never acknowledges that he owed these variants to Hoeschelius or, via Hoeschelius, to Hohenburg's codex.

The work of a twenty-year-old, the editions of Scylax and the anonymous *Periplus* is remarkably precocious in the manner in which it draws attention to parallels in other authors (and not always the best known ones at that). It seems that Vossius owed at least some of his parallels to Saumaise, for example when he referred to a manuscript of the *Historia Naturalis* of Pliny the Elder which was in the possession of Saumaise. ⁵⁵ One example will suffice to show how complex his reasoning could grow. In explaining that the city of Historio was also known in antiquity as Histriopolis, Vossius referred to a manuscript of the *Itinerarium Antonini* which belonged to Saumaise. In the *Itinerarium* the city name 'Historio'

⁵⁰ Saumaise, Plinianae exercitationes.

⁵¹ See Blok, Isaac Vossius and his Circle, 43.

⁵² Scylax from Caryanda (Σκύλαξ ὁ Καρυανδεύς), a sailor from Karia who was famous for exploring the Indus, the coasts of the Indian Ocean, and the Red Sea. Cf. Herodotus, *Histories*, 4.44. For Vossius' edition, see also Van Romburgh, *For my Worthy Freind*', 640, n. 9; Blok, *Isaac Vossius and his Circle*, 41–44.

⁵³ See for example, Vossius, *Periplus Scylacis Caryandensis*, 10, where Vossius in his commentary writes: 'Μένδυ, ἄφυστις] lege Μένδη Ἄφυτις, ut Salmasius'. Here he credits the wrong person: this emendation was already suggested by Hoeschelius, ed., *Geographica*, 200 (ad 133, line 9).

⁵⁴ Herwart owned a rich library of Greek manuscripts; see *Neue Deutsche Biographie* VIII, 722–723.

⁵⁵ 'In Vet. Cod. cuius lectiones debeo viro Illustri Cl. Salmasio, legebatur:...' (Vossius, *Periplus Scylacis Caryandensis* (Notae) 33 (ad 5)).

appeared, but according to Vossius, one had to read 'Histriopolin', because that is how the city was named in yet another geographical source, the *Tabula Peutingeriana*, a text edited by David Hoeschelius' friend and colleague Marcus Welser (who had corresponded about this edition with Scaliger). Here we see Vossius engaging in a complex game of intertextuality: on the basis of the *Tabula Peutingeriana*, he corrects the reading in the *Itinerarium*, ⁵⁶ as if he has forgotten that he is actually busy making a commentary on Scylax, not on the *Itinerarium*. In other words: in his commentary on Scylax, Vossius changes the variant, found in another source, of the city name he is explaining. It remains a variant, but a better one.

Vossius not only corrects on the basis of intertextuality with other texts, he also explains variants on a morphological basis: one city is called both Callatia and Callantia because a nu is often inserted before the tau.⁵⁷

Occasionally, a correction is based on chronological arguments: Vossius contests the reading Ἰουλίου ἄκρα (for Iulia Caesarea, i.e. modern day Cherchel in Algeria), because this name was used only after the time of Augustus, and Scylax of Caryanda lived before that time (sixth century BC). Vossius acknowledged that the text which he was editing and which was ascribed to Scylax, was in fact a much later work by an epitomizer and not the original by Scylax of Caryanda. Assuming a mistake of the epitomizer or of some scribe, Vossius supposes that Scylax originally must have written Ἰωλ ἄκρα. Vossius not only emended his texts, he also tried to reconstruct what the historical Scylax must have written. The edition of the *Periplus* shows Vossius' multifaceted approach to his text: he emended on the basis of intertextuality, manuscript evidence, morphology, later geographical knowledge, and on the basis of chronology. This shows a comprehensive philological approach to his text, including arguments from literature, stemmatology, morphology and history.

The project about Scylax installed in Vossius an interest which he would never lose. It was from this work that he came up with the idea

⁵⁶ Έἰς πόλιν καὶ ποταμὸν Ἰστρον] Diversa est haec urbs a portu Istrianorum, quem supra recensuit. Alii "Histriopolin" vel "Histropolin" vocant. Antonini itinerarium sive Aethici potius: "Historio" M. P. XXV; "Tomos" M. P. XXXVI; "Calatin" M. P. XXX. Ita mss Salmasii. Sed omnino legendum "Histriopolin", non "Histrio". Sic est in tabula Peutingeri' (Vossius, *Periplus Scylacis Caryandensis* (Notae), 36 (ad 11)). Saumaise, who apparently had manuscripts of the *Itinerarium* in his possession, communicated his readings to Vossius.

⁵⁷ Ibid.

 $^{^{58}}$ 'Hunc autem Periplum Scylacis esse ἐπιτομὴν et compendium maioris operis, nullus dubito. Multa enim hic leguntur, quae plane sunt contra sententiam Scylacis, in quibus epitomator erraverit.' (Vossius, *Periplus Scylacis Caryandensis*, sig. [4 $^{\text{T}}$]).

⁵⁹ Ibid., (Notae), 23 (ad 43 (pro 47)).

of making an edition of Ptolemy's Geographia. 60 He could borrow a copy of Ptolemy from Saumaise, which had been collated against two manuscripts from the Palatine Library. He aimed to consult other manuscripts of Ptolemy on his Grand Tour. On the basis of new manuscripts he hoped to be able to amend the existing editions. Before he started his journey, he had already seen two manuscripts of Ptolemy which came from England: his uncle Franciscus Junius (1591–1677) had sent them to him. He collated a manuscript of Ptolemy in Paris and, later in life, he owned at least one manuscript of Ptolemy's Geographia.61 The plan to present an edition of Ptolemy never materialized, perhaps because Vossius said he could not make sense of the calculations.⁶² But Vossius would continue to engage in geography all his life, as his later works show: his treatise on the origins of the Nile contains complete maps of North-East Africa;63 then there are his treatises on the longitude and on the northern route to the Far East, 64 and his observations on Pomponius Mela,65 all of which testify to his interest in geography.

It should be pointed out that much of Vossius' geographical interest can be more specifically characterized as nautical or hydrographical, considering his *De motu marium et ventorum liber* of 1663. Even here, there is resemblance to Joseph Scaliger, who wrote a *Discours de la jonction des Mers, du desseichement des Marais et de la reparation des rivieres, pour les rendre navigeables*. ⁶⁶ While Scaliger copied out various manuscripts

⁶⁰ The last sentence of his dedicatory letter to Saumaise runs: 'meliora a nobis quotidie exspecta'. And the last sentence of his preface is more explicit: 'Sed de eo nos alias pluribus, ut spero, ad Ptolomaeum nostrum; quem propediem, Deo volente, habebis, lector' (Ibid., sig. 2^r).

⁶¹ Colomiès, Opera, 1709, 864, no. 214.

⁶² Blok, Isaac Vossius and his Circle, 44-45.

⁶³ Vossius, *De Nili origine*. The maps are accompanying pages 48 and 64; page 153 testifies to Vossius' interest in African geography and the geography of the tropics. See also the paper by Karel Davids in the present volume.

⁶⁴ Vossius, *Variarum observationum liber*, 141–185 ('De emendatione longitudinum') and 187–194 ('De patefacienda per septentrionem ad Iaponenses et Indos navigatione').

⁶⁵ Vossius, Observationes ad Pomponium Melam; Id., Observationum ad Pomponium Melam appendix. In this work, Vossius frequently refers to manuscripts once again, in particular one from the Vatican. Colomiès observed that there were four manuscripts of Mela in Vossius' library (Colomiès, Opera, 872, no. 85; 876, nos 149 and 160, 880, no. 227), but gives no details. Vossius also owned three printed copies of Mela: one from Andreas Schottus, with a collation against un unkown manuscript, made by Gerardus Vossius jr. (Gerardi filii); one edition printed in Milan 1471, emended by Crucejus (Jacobus Cruquius) (ibid., 891, no. 29); and an edition from Petrus Olivarius (ibid., 892, no. 45). For Vossius' interest in Mela, see also Fokko Jan Dijksterhuis' contribution to the present volume.

⁶⁶ On this treatise, printed in Scaliger, *Opuscula*, 1610, 539–560 (ed. 1612, 467–478), see Davids, 'Humanism and water management', who provides a re-edition of the text.

of small geographical works by such authors as Scymnus of Chios, Dionysius son of Calliphron, Dicaearchus, Marcianus from Heracleia, and Empedocles,⁶⁷ Isaac Vossius owned Casaubon's edition of Strabo, with handwritten emendations and comments by Philippus Cluverius.⁶⁸

Chronology

Joseph Scaliger is best known for his work on chronology, most notably his work on calendars of different cultures (De emendatione temporum) and his groundbreaking edition, and partly reconstruction, of the *Chronicon* of Eusebius, in his *Thesaurus temporum*. Much of the interest was triggered by his edition of Manilius of 1579. Some of this interest, most notably in Eusebius, found echo in the work of Saumaise. Saumaise worked on early church history, and his notes on Jerome's Latin translation of Eusebius' chronicle and on the Greek text of Eusebius were printed posthumously.⁶⁹ Saumaise, then, was intimately familiar with the history of Eusebius' Chronicle, and he will no doubt have discussed these matters with young Vossius. But Isaac also drew his inspiration directly from Scaliger. His interest in the history of the world was much influenced by Scaliger's De emendatione temporum and his edition of Eusebius, works which Isaac studied.⁷⁰ At one point in 1651, Vossius discouraged the Amsterdam printer Johannes Jansonius (1588–1564) from venturing a new edition of Eusebius, while at the same time planning a new edition himself on the basis of manuscripts which he acquired with the support of Christina: 'Scaliger added many things to that edition of his, and nice things at that, but the things I will collate will, I hope, be no less or worse.'71 Clearly, Scaliger was

 $^{^{67}}$ See LUB, Ms. Scal. 32: Scymni Chii Orbis Descriptio (fols 5^r – 13^v); Dionysii Calliphrontis filii Descriptio Graeciae and Dicaearchi Descriptio Graeciae (fols 14^r – 18^v); Marciani Heracleensis Prooemium Epitomes Peripli Menippei (fols 19^r – 20^v); Empedoclis Sphaera (fols 20^v – 22^v).

⁶⁸ For Vossius' ownership, see the contribution by Astrid Balsem to the present volume, p. 297, appendix 1, listed there under page 2, no. 23 of the 1666 sale catalogue of Vossius' library.

⁶⁹ Schurzfleisch, Notitia.

⁷⁰ Colomiès (*Opera*, 886, no. 1) lists among Isaac's books a copy of Scaliger's edition of Eusebius, collated by Cornelius Tollius, a one-time amanuensis of Gerardus Joannes Vossius (Blok, *Isaac Vossius and his Circle*, 233).

⁷¹ I. Vossius to N. Heinsius, 12 July 1651: Eusebius, quem sub manibus habere scribis Iansonium, opus erit longum et laboriosum, nec intra triennium absolvendum. Multa sunt et pulcra, quae addidit isti editioni Scaliger, non tamen pauciora et deteriora erunt ea, quae ipse, ut spero, conferam. Quod tamen ne aut ostentatione ingenii, aut quadam vanitate dici a me putes, quod ope eorum codicum, quos olim contuli, et quos nunc beneficio

a point of reference for Vossius. In another letter, Vossius demolished his former teacher Saumaise, who boasted to have emended those passages in Manilius which had baffled Scaliger so much that he could not solve their puzzles and instead marked them with asterisks. But Vossius had his doubts about anyone other than himself who claimed to be better than Scaliger. He asked Nicolaas Heinsius to look out for a good codex of Manilius and collate it with the corrupt passages which Scaliger had indicated as being beyond emendation (see the letter quoted at length below, pp. 38–39). Both with Eusebius and Manilius, and, more emphatically still, in *De emendatione temporum*, we see Scaliger as the inspiration for Vossius' interest in chronology. Anthony Grafton's contribution to the present volume sufficiently points out how Scaliger's discussion of the lists of Kings by the Egyptian writer Manetho inspired Vossius to his chronological work on the antiquity of the world, which is also discussed in Scott Mandelbrote's paper.

Church History

34

Scaliger edited the Chronicon of the church father Eusebius, but other church fathers did not appeal so much to him. Augustine, for example, was only mentioned three times in his edition of Eusebius. Scaliger admired Augustine, but criticised him, like other Fathers, for not having known Greek and Hebrew. Naturally, Jerome was an exception and Jerome took centre stage in the Eusebius edition, which also contained Jerome's Latin translation of that work. But Scaliger's interest in the Fathers was strictly historical, not at all theological, at least not in his published works.⁷² Casaubon in this sense was somewhat different, although his refutation of Cesare Baronio's handling of the Church Fathers remained rather limited: it is more an attack on Baronio's methods of scholarship, whom he criticised for not knowing Greek and Hebrew, for lacking philological acumen, and for using many apocryphal sources in the wrong way. One reader thought that Casaubon's work dealt too much with matters of chronology and too little with theological controversy; others were disappointed that Casaubon appeared not to be a theologian.⁷³ Like Scaliger, then, Casaubon was not much of a controversialist in theologicis.

Serenissimae Reginae nactus sum, hoc me posse praestare existimem' (Burmannus, *Sylloge* III, 619–620).

⁷² See Van Miert, 'Scaliger, Joseph'.

⁷³ Pattison, Casaubon, 333.

After Scaliger and Casaubon, Protestants set their hope on Saumaise as a champion to refute Baronio. Saumaise had done some work in the subject: the first fruit of his labours was an edition of Nilus' De primatu Papae, published when he was about twenty years old. It was followed thirty-seven years later by his own attack on the pope, similarly entitled De primatu Papae. In the meantime, he had been busy editing the Historia Augusta and Solinus. He had also published a vast commentary on Tertullian's De pallio. This was a text on which Casaubon had once wanted to lecture at the University of Geneva; for this purpose, Casaubon discussed the text with Scaliger. The Genevan council of Calvinist ministers, however, vetoed Casaubon's plan.⁷⁴ It is as if Saumaise wanted to make up for this. De pallio, which is, at about 3,500 words, one of Tertullian's shortest works, stands out in his oeuvre as a more or less humorous speech about clothing customs. Clearly, by choosing from all the works of Tertullian this one work with no marked theological argument, Saumaise shows he inherited the antiquarian mindset of his teachers.

It is here where Isaac Vossius' edition of the letters of Ignatius of 1646 comes in: the authenticity of these letters had been supported by Casaubon in 1614 in his Exercitationes.75 For his edition, Vossius relied heavily on new manuscript evidence from Florence. In his third textual note, Vossius mentions James Ussher (on page 257), but only as an editor. He does not tell us that it was Ussher who had initiated him in the complex textual history of the letters of Ignatius and made him aware of the manuscript in Florence (a manuscript he did not share with Ussher). Instead, he mentioned André Rivet as someone who pointed out that the then current editions were heavily corrupted by interpolations. In his edition, Vossius relied again on manuscript evidence, and this time on one codex only. But although he often referred to parallel readings in order to correct the Medicean manuscript, he presented as emendations to the Mediceus what in fact were corrections of the mistakes he himself had made when transcribing this manuscript (many of these last auto-emendations were correct!). Although he would later acknowledge that his youthful transcription of the Florentine manuscript was inadequate, it does not mean that Vossius' method was wrong: his first note specifies that the Medicean manuscript was written in Longobardic script, in other words, that it was

⁷⁴ Ibid., 46-47.

 $^{^{75}}$ Pattison, Casaubon, 335; Casaubon, De rebus sacris exercitationes, 543a (book XVI, exercitatio 150).

very old, which shows that he tried to make an effort to underscore the historical authority of his source. To Vossius saw it as his task to give a text and a translation, and to deal with the question of genuineness by means of a philological method of establishing chronological relations between different versions of the text. This was the method which Isaac Casaubon three decades earlier had employed in his *Exercitationes* against Baronio.

Conclusion

Not all of his interests or oversights were inherited by Isaac Vossius from his masters. Saumaise's edition of the Historia Augusta of 1620 looked back to the ground-breaking edition of Isaac Casaubon (Saumaise explicitly posed as his successor), but was also founded on a new manuscript which Saumaise himself as a young student had uncovered in Heidelberg.⁷⁷ Saumaise, who refers all too often to the encouragements of (customarily anonymous) friends, tells us in the preface to the reader how he came to undertake an edition of the *Historia Augusta*: When he was in Heidelberg and had access to the Palatine Library thanks to Janus Gruter, he came across an 'antiquissimus codex' of the Historia Augusta. He compared it with the edition of Casaubon, on whom he bestowed lavish praise, and came to the conclusion that the Heidelberg codex was superior to the manuscripts found in the Royal Library in Paris on which Casaubon had relied. In fact, it was a better codex than any known manuscript in Italy and France. After returning to Paris, Saumaise shared his notes with Casaubon, who planned a second edition of his work. This second edition, however, never came about, and therefore Saumaise eventually did the work himself; learned colleagues asked him to do so, because he was 'a good successor to take the place of such a great Servant of the Muses'. So Saumaise was 'chosen as one out of many and was demanded to put the finishing touch to it and complete the work which the great man, cut short by death, had left behind unfinished'. Saumaise repeated much

⁷⁶ For Vossius' rashness, also see Gronovius' judgement in Blok, *Isaac Vossius and his Circle*, 49.

⁷⁷ Claudius Salmasius lectori suo s[alutem], Dijon 12 August 1619: 'Post eius [sc. Casauboni] e Gallia discessum, et non longo medio tempore, e vita quoque excessum, ac spei quam de illa editione conceperamus, frustrationem, quum alii multi fortasse superessent adhuc litterati et ingeniosi viri qui hoc idem praestare possent, ad me itum est: bonum scilicet sequutorem, qui in locum tanti Musagetae substitueretur, atque unus e multis eligeretur ac posceretur, ad expoliendum consummandumque id opus quod ille morte praeventus imperfectum reliquit' (Saumaise, ed., *Historia Augusta*, sig. *6r).

of this story in his first note, underlining the superiority of the Heidelberg manuscript. He came to the conclusion that an edition printed in Milan (presumably the edition of the *Historiae Romanae* by Accursius) was superior to that of Casaubon, for it was twenty-five years older than the Venetian edition used by Casaubon, which Casaubon had held to be the best.⁷⁸ The Milan edition had been based in turn upon the Palatine manuscript, Saumaise argued. He also came to the conclusion that all the existing manuscripts which lacked part of the lives of Nerva and Trajan derived from one archetype which had this defect.⁷⁹ Throughout his *emendationes et notae*, Saumaise relied heavily on the Palatine manuscript, comparing it with Casaubon's edition and the edition from Milan. On page 171, he refuted an argument from Casaubon with the help of a passage in Scaliger's commentary on Eusebius. Casaubon's emendations, to which Saumaise referred on virtually every page of his commentary, were added to the edition.

A work such as this is not to be found in the output of Isaac Vossius, although Vossius later in life did study the same text, if only with an aim to refuting Saumaise's conclusions, as will be shown in the letter cited below. Moreover, he possessed Casaubon's own copy of the *Historia Augusta*, with notes in Casaubon's own hand.⁸⁰ What Vossius inherited, more broadly speaking, however, was the antiquarian mindset of such a work.

In dealing with polymaths it is of course easy to see overlap in intellectual output, for polymaths were interested in many fields. A shared interest across the generations might be merely accidental. But it has also become clear that there are many explicit references in Isaac's writings to the work of Saumaise, Scaliger and Casaubon, and that there had been explicit handing down of manuscripts from one generation to another. If one looks at the sale catalogue of Vossius' library of 1666, it becomes clear that Vossius owned numerous books which had belonged to Saumaise, with marginal annotations by Saumaise or by Saumaise's father-in-law Josias Mercier (ca. 1560–1626), or even books annotated by Scaliger. SI Vossius also actively sought to lay hands on manuscripts of texts on which Saumaise had worked.

⁷⁸ Perhaps a reprint of the one printed by Bernardinus Novariensis, in 1489.

⁷⁹ Saumaise, ed., *Historia Augusta*, second pagenumbering, 1–2.

⁸⁰ Colomiès, *Opera*, 891, no. 14.

⁸¹ See appendix on p. 41.

This quest, and Vossius' possession of these items from Saumaise's library, do not necessarily point to a favourable disposition towards his former teacher. In fact, after Saumaise, who fostered a pathological hatred against his enemies, 82 had become estranged from Vossius, the latter showed contempt for much of Saumaise's work. A letter from 1652 to Nicolaas Heinsius is particularly revealing and worth citing at length:

Saumaise also, like that other person [Christine of Sweden's court physician Pierre Bourdelot], may at times triumph over me. But I will show Saumaise is an idiot and the other a clown who does not earn the title of physician, but rather of a corpse-bearer, for he has killed so many people, including our Tissenhaus and many more others (more about those on another occasion). I have examined part of Saumaise's Exercises on Pliny. I encountered lots of monstruous errors, and such which not even a mediocre scholar would ever commit. At times he calls the Nile 'megálon potamón' [instead of mégan potamón], and in the nominative 'megálos potamós' [instead of *mégas potamós*]. Does this not surpass all stupidity? A small book about the resurrection and another one about the cardinal virtues, which hitherto was published anonymously, was written in the time of Cyprian, he says. But it was by a certain monk called Bernardus, who lived five hundred years ago. He extracts quite some testimonies from these books against Hugo Grotius, which in itself I find very funny. I will collect several thousands of similar mistakes, and hold them up for solving to our hero, who thinks he is impeccable. I will prove that out of ten of his corrections hardly one is in fact correct: that in botanical issues he makes error after error; that he is an ass in geography, and has never observed anything good. More than his other corrections he often likes to boast of those to Manilius. He thinks he has emended by sheer ingenuity those passages in Manilius which Scaliger put aside as hopeless. If you come across some good manuscript of Manilius, I would like you to compare the places which Scaliger marked with an asterisk with it. I wish I could inspect some copy of Manetho, which you say our friend Langermann has transcribed, and about which I am thrilled. From this manuscript much light could perhaps be shed on Manilius. I wish he would also transcribe Cosmas Indicopleustes' Christian Topography. And if you visit Rome again, as you write, I hope you can obtain access to the library of the Duke of Altemps. Extant there are Isidore of Charax' Parthian Stations; Hoeschelius has edited a small fragment of it. There are also various other things there which you will not find anywhere else, such as Antonius Aurelianus' Architecture, Apollodorus of Athens' Grammar, Censorinus on planets, and [a codex of] Manilius with an ancient scholiast. There is also a manuscript of Spartianus there. But this is all to no avail, for I fear you will not have access to that library. But where ever you are, I beg you to inquire diligently after manuscripts of those authors which Saumaise has edited,

⁸² See Blok, Isaac Vossius and his Circle, 36.

like Tertullianus' *De pallio*, Solinus, and the *Historia Augusta*. I also wish you would collate that chapter from Pliny the Elder's last book, in which the names of the gems are listed in alphabetical order. You known that that last book is absent in almost all manuscripts of Pliny. Saumaise has gathered much foolish nonsense about this chapter, also because he himself had no ancient manuscripts here, which are his sole source of knowledge.⁸³

After the estrangement between Saumaise and Vossius, then, the latter's predilections were still motivated, albeit in a negative way, by his former teacher's interests. It is also not surprising that Vossius should mention Hoeschelius, whose edition of geographers was criticised by Saumaise, as we have seen. In addition, the letter confirms that Vossius shared the polemical attitude of his teacher, described at the beginning of this article. And it once again underlines the importance Vossius attached to manuscript evidence, criticising the conjectures which Saumaise devised without manuscript evidence; thinking for himself led Saumaise astray. Of

⁸³ Vossius to Heinsius, 24 November 1652: 'Salmasius quoque ut et is aliquandiu triumphet per me licet. Ostendam tamen illum esse nebulonem, et alterum scurram, nec mereri nomen medici, sed vespillonis potius, cum tam multos occiderit, inter quos Tissenhausium nostrum, aliosque complures, de quibus alias. Excussi iam aliquam partem Exercitationum Plinianarum. Portentosos multos deprehendo errores, et quales vel mediocriter eruditus nunquam commisit. Nilum aliquoties vocat μεγάλον ποταμόν et in nominativo μεγάλος ποταμός. Nonne hoc omnem stuporem superat? Libellum quendam de resurrectione, et alium de virtutibus cardinalibus, qui hactenus sine nomine auctoris prodiit, dicit esse scriptum aevo Cypriani. Atqui est Bernardi cuiusdam monachi, qui vixit ante annos quingentos. Plura ex his libellis testimonia petit contra Grotium. Quod et ipsum mihi perquam videtur lepidum. Aliquot millia similium errorum colligam, et huic nostro heroi, qui se impeccabilem esse existimet, solvenda proponam. Ex correctionibus decem vix unam veram esse ostendam. In botanicis perpetuos committere errores. In geographia esse asinum, et nihil unquam boni observasse. Prae caeteris suis correctionibus solet saepe iactare illas in Manilium, cuius locos, a Scaligero pro desperatis relictos, se ex ingenio emendasse existimat. Velim, si in codicem aliquem bonum Manilii incidas, ea loca quae Scaliger asterisco notavit cum manuscripto committas. Vellem videre specimen aliquod Manethonis, quem descripsisse ais nostrum Langermannum, de quo sane multum gaudeo, forsan ex illo potest multum illustrari Manilius. Vellem quoque describeret Topographiam Christianam Cosmae Indopleustae [sic]. Quod si Romam denuo repetas, ut scribis, utinam possis accessum impetrare ad Bibliothecam Altemsianam. Exstant in ea Isidori Characeni Stathmi Parthici, cuius exiguum fragmentum edidit Hoeschelius. Exstant quoque ibi plura alia, quae frustra alibi quaeras, uti sunt Antonii Aureliani Architectura, Apollodori Atheniensis Grammatica, Censorinus De planetis, Manilius cum veteri Scholiaste. Exstat quoque ibi Spartianus manuscriptus. Verum haec frustra. Vereor enim ut tibi non pateat accessus ad illam. Ubi ubi vero sis peto, ut diligenter inquiras in illorum autorum veteres codices, quos edidit Salmasius. Nempe Tertulliani De pallio, Solini, et Historiae Augustae Scriptorum. Utinam quoque conferas caput illud Plinii libro postremo, quo gemmarum nomina ordine alphabetico recensentur. Scis librum postremum in plerisque fere Plinii codicibus abesse. Multas magnasque nugas ad hoc caput congessit Salmasius, cum et ipse veteribus hîc destitutus fuerit membranis, ex quibus solis aliquando sapit' (Burmannus, Sylloge III, 651-652).

course, Vossius was not very felicitous himself either, but that was due to the fact that he was sloppy, rather than misguided.⁸⁴

Scaliger, Saumaise and Vossius also show similarities in what they were *not* interested in. In this sense, we singled out the fact that none of them engaged in dogmatical controversy. They were not keen on writing and performing orations for a student audience. None of them produced the kind of lyrical poetry which Daniel or Nicolaas Heinsius wrote. None of them had the pedagogical attitude which characterized a Justus Lipsius (the third member of the 'learned triumvirate' besides Scaliger and Casaubon), or a Gerardus Joannes Vossius (of Saumaise's generation). In spite of the so-called encyclopaedic knowledge of Casaubon, Scaliger, Saumaise and Isaac Vossius, they did not write handbooks. Rather, they were specialised philologists and antiquarians who explored the remote areas of scholarship.

A key period in the passing down of Casaubon's and Scaliger's interest to Vossius via Saumaise, is Saumaise's traineeship in the Palatine Library. He was sent there by Casaubon and coached by Scaliger; from Heidelberg, the resources came down to Isaac Vossius. A comparison of Vossius' philological methods with that of his teachers, has been beyond the scope of this article, especially as little work has been done on the scholarly methods of Casaubon and Saumaise. Nevertheless, the few examples cited do show that while manuscript evidence was central to Vossius' approach, he also drew attention to a variety of contexts to explain or suggest readings. In other words, in his philological methods he combined different ways of looking at a text.

⁸⁴ See above, n. 76.

Appendix: Books in Vossius' library which were formerly owned by Saumaise and which were annotated by Saumaise, Josias Mercier and Scaliger (The numbers refer to Appendix 1 in Astrid Balsem's contribution to the present volume, pp. 297–301.)

- Xenophontis opera Graeco-lat. apud Henr. Stephanum 1581, innumeris locis emendata manu Cl. Salmasii (Vossius, Catalogus, 2, no. 37);
- *Polybius* Casauboni Graeco-Lat. Paris. 1609, nonnulla in eo emendata manu Salmasii (3, no. 43);
- Eusebius *De praeparat. & demonstrat. Evangelica*, Graece apud R. Stephan. 1544, manu I. Merceri multis in locis emendat. (5, no. 92);
- Aristophanes cum scholiis Graecis, Basil. 1547, manu Iosiae Merceri et Cl. Salmasii passim emendatus et illustratus (5, no. 99);
- Pausanias Graece apud Aldum, manu Cl. Salmasii multis in locis emendatus (5, no. 110);
- Is. Casauboni Animadversiones in Athenaeum, Lugd. 1600, quaedam annotavit Cl. Salmasius (6, no. 132);
- Plutarchi Moralia Graece. Basil. 1542, Mercerus opus hoc contulit cum ms. et infinitis locis emendavit (8, no. 160);
- Corpus Grammaticorum antiquorum ex edit. Heliae Putschii, Hanov. 1605. plurima passim in hoc opere felicissime emendata sunt manu Cl. Salmasii (13, no. 3);
- Anthologia Graecorum Epigrammat. in Graece Typis Regiis, 1566. Cl. Salmasius manu plurima adscripsit et emendavit (13, no. 5);
- Caesaris Comment. Graece et Latine, cum commentariis omnium, Francof. 1606. Cla. Salmasius manu sua multa loca emendavit (13, no. 11);
- Theophylacti Simocattae Historia Graeco-Lat. Item Chronicon Georgii Phranzae,
 Ingolstadii 1604. Paucula adscripsit Ios. Scaliger (16, no. 57);
- Ausonii Burdegalensis, cum notis Scaligeri et Vineti, Burdigal. 1690. [sic] Item Chronicon rerum Burdigalensium, ibid. Adscripta ad oram plurima manu magni Scaligeri, tam in ipso Ausonio, quam in suis commentariis (25, no. 229);
- Plutarchi Opera Graece, ibid. (Paris) Tom. 6. infinitis locis emendata felicissime manu Cl. Salmasii (37, no. 114);
- Valerius Flaccus cum notis Carrionis, apud Plantin. 1565. Ios. Mercerus quaedam manu sua annotavit (40, no. 166);
- Eunapius *De vitis Philosophorum* Graeco Lat. 1516. Quaedam manu sua emendavit Ios. Mercerus (41, no. 188);
- Variae lectiones Mureti, Aug. Vind. 1600. paucula manu sua adscripsit Ios. Scaliger (46, no. 292);
- *Epigrammata veterum Poetarum Pythaei*, Paris. 1580. Quaedam manu sua emendavit Ios. Mercerus (49, no. 337);

Later in life, Vossius owned:

- Stephanus' editions of Aeschylus and of Codinus' De originibus Constantinopolinis, with manuscript notes by Scaliger (Colomiès, Opera, 887, no. 20 and 889, no. 57)
- a copy of Franciscus Junius the Elder's edition of Tertullian, with manuscripts notes by Scaliger, but in Baudius' hand (890, no. 3)
- a Nonius Marcellus with Scaliger's handwritten collations (no. 5);
- a *Historia Augusta* with Casaubon's handwritten notes (891, no. 14);
- Putschius' edition of Latin grammarians, with emendations added in Saumaise's hand (no. 19);
- Taubmannus' edition of Plautus, with emendations added in Saumaise's hand (no. 22);
- Torrentius' edition of Suetonius, with Casaubon's handwritten notes (no. 24);
- Tertullian's *Ad nationes*, with handwritten notes by Saumaise (no. 26);
- a Basle edition of Plautus, with emendations and notes in Scaliger's hand (892, no. 60);
- Leiden editions of Sidonius Apollinaris and Cornelius Celsus, both with Scaliger's handwritten emendations (894, no. 95 and 104);
- Pulmannus' edition of Claudianus, with emendations in Scaliger's hand (no. 110); another copy of the Leiden edition of Cornelius Celsus, this time with notes in Casaubon's hand (894–895, no. 113);
- an edition of Valerius Flaccus, with Scaliger's handwritten emendations (no. 122);
- Gryphius' edition of Silius Italicus, with notes in Casaubon's hand (124);
- Savaro's edition of Nepos, with notes in Scaliger's hand (no. 135).

All in all: eight *libri annotati* with Scaliger's autograph annotations (and one with a copy of his notes); four editions with Casaubon's autograph annotations; and three copies with Saumaise's autograph annotations.

Of these, only Elias Putschius' edition of Latin grammarians with Saumaise's annotations features in the sale catalogue of 1666 (13, no. 3); it would appear that all the other *libri annotati* mentioned were sold 1666, unless some of the editions mentioned in 1666 appear also in Colomiès' list of Vossius' *libri annotati*, but remain unidentified there because Colomiès failed to mention the hand of the annotator. Colomiès, however, seems to have made an effort to identify all hands if possible (for other *libri annotati* in his list he managed to identify the hands of Meric Casaubon, Franciscus Junius the Younger, Janus Gruter, Hugo Grotius, Isaac Vossius, Gerardus Vossius G. filius, Franciscus Nansius, and Dominicus Baudius; he would not have neglected to identify, if he could, those of Scaliger, Casaubon and Saumaise, of which he at least identifies, as we have seen, nine, four and three *libri annotati*).

ISAAC VOSSIUS, CHRONOLOGER

Anthony Grafton*

A Storm over Chronology

In 1659 Isaac Vossius made himself the center of a storm: a storm over chronology. In a pamphlet On the True Age of the World, which led to sharp exchanges with the Leiden historian Georg Hornius (1620–1670) and others, he argued that the cosmos was some 1,200 years older than most Protestants believed. By following the longer chronology of the Septuagint, the ancient Greek version of the Old Testament, rather than the Hebrew Masoretic Text, Vossius told his readers, they could solve two pressing problems at once. Since 1655, when Isaac La Peyrère (1596–1676) had published his work on *Men Before Adam*, a dangerous 'sect' had sprung up. 1 Its members shared La Peyrère's belief that the oldest human civilizations the Chaldeans, the Egyptians, the inhabitants of the Americas – had come into existence long before the Flood. They clung to this belief even though La Peyrère's book had been refuted many times over and the author himself, 'transformed by the great rewards that were offered him, has now abandoned his opinion'.2 In fact, however, Vossius argued, the true histories of all of these civilizations had unrolled between the Flood – properly dated – and the Incarnation. The claims that the Chaldeans and Egyptians made to great antiquity rested on sand.

Yet Vossius still thought it necessary to extend historical time farther back from the Incarnation than most of his fellow Protestants thought

^{*} Warm thanks to Henk Jan de Jonge and Scott Mandelbrote for comments and to Dirk van Miert for help of many kinds.

¹ For the chronological debate unleashed by La Peyrère see Allen, *The Legend of Noah*; Klempt, *Die Säkularisierung der universalhistorischen Auffassung*; Rossi, *Dark Abyss of Time*; Jorink, *Reading the Book of Nature*; Weststeijn, 'Spinoza sinicus'. On the larger story of La Peyrère's understanding of the biblical text – which began from and rested on exegetical and theological rather than chronological concerns – see Quennehen, 'A propos des Préadamites', and Idem, 'Un nouveau manuscrit des *Préadamites'*; Malcolm, *Aspects of Hobbes*; Poole, 'Seventeenth-Century Preadamism'; Poole, 'Francis Lodwick's Creation'.

² 'Libri huius auctor licet toties confutatus, licet multis ac magnis propositis praemiis mutatus, iamdudum sententiam suam deseruerit; superest nihilominus eius opinio in illa quam reliquit secta, quam avide amplectuntur, quotquot libenter a sacris dissentiunt literis' (Vossius, *De vera aetate mundi*, L).

prudent or pious. By doing so, he explained, one could find room for the most exciting addition to true history that had been made in decades: the chronology of the Chinese kings published by the Jesuit Martino Martini (1614–1661) in Munich in 1658 and reprinted in Amsterdam in 1659,³ True, La Peyrère and his followers had cited the 'perfectly accurate' chronology of the Chinese kingdom as evidence for their views.⁴ But they knew the Chinese records only at third hand, from the 1586 Historia de las cosas más notables, ritos y costumbres del gran reyno de la China of Juan González de Mendoza (1545-1618).5 The new chronology was even more disturbingly protracted than the old, and yet, Vossius insisted, it clearly deserved belief. It had been recorded by the oldest civilization in the world, which had preserved its literary tradition – one that included 'writers older than Moses himself' – accurately for 4,500 years.⁶ All one needed to do – so Vossius explained, in language designed, as usual, to provoke – was to concede that the Hebrew text of the Bible was just as imperfect a reflection of the original as any other of the versions – or indeed any other text handed down by scribes who were liable to error. 'It would be wonderful if we had the autograph of Moses. But is anyone so lacking in judgment as to think that God always stood next to the Jewish scribes and directed their hands and pen?'7 Granted this minor concession, one could replace the shorter chronology of the Hebrew text with the longer one of the Septuagint and make room for the Chinese without running any risk of impiety. In a final, characteristically unexpected fillip, Vossius denied the univer-

³ Martini, Sinicae historiae decas prima.

⁴ 'His [the Babylonians and Egyptians] addunt nonnulli Seras, quos perperam Sinas adpellant, e quorum accuratissima Chronographia Mosaycae historiae veritatem evertere ac immensam orbis antiquitatem adstruere conantur' (Vossius, De vera aetate mundi, III).

⁵ 'Prodigiosa insuper visa est Scaligero Sinarum periodus: *Iuxta quam*, ait ille, *hic annus Christi 1594* (quo emendationem scribebat) *est, a conditu rerum, octingenties octagies millesimus septuagesimus tertius*' (La Peyrère, *Praeadamitae*, Systema theologicum, pars 1, 231–232). Joseph Scaliger had read González de Mendoza's book in 1587 and drew on it in the second (1598) edition of his *De emendatione temporum*, which La Peyrère followed. See Grafton, *Scaliger* II, 362, 406.

⁶ 'genus hominum omnium quotquot unquam fuere longe literatissimum' (Vossius, *De vera aetate mundi*, XLIV): 'Continuam quater mille et quingentorum annorum historiam monimentis et annalibus suis conditam servant. Scriptores habent ipso etiam Mose antiquiores...' (Ibid., XLIV–XLV). On scholarly and philosophical interest in China in this period see Pinot, *La Chine et la formation de l'esprit philosophique*; Duyvendak, 'Early Chinese Studies in Holland,'; Weststeijn, '*Spinoza sinicus*'. For the role of China in chronology see Van Kley, 'Europe's "Discovery" of China'.

⁷ 'Bene sane si Mosis haberemus autographum. Adeone vero quis inops judicii, ut existimet adfuisse Deum semper Judaeis librariis, ac direxisse illorum manus calamumque?' (Vossius, *De vera aetate mundi*, V).

sality of the Flood, as La Peyrère had — even though he had refuted his opponent's chronological arguments for doing so.⁸ For all its paradoxes, Vossius' *Dissertatio de vera aetate mundi* clearly violated scholarly norms and refuted well-established views. No wonder, then, that he immediately became involved in a pamphlet war on chronology with the Leiden professor Georg Hornius, or that other critics soon joined in on Hornius' side.

Chronology in the Dutch Golden Age

The territory that Isaac Vossius entered in 1659 was difficult even to enter — much less to settle and cultivate. For the chronologer's specific task — as Isaac Vossius' father, Gerardus Joannes, lucidly explained — was arduous and technical: to provide the framework on which the true historian could build the sort of narrative that informed and instructed readers:

We take account of two things in this realm, matter and form. The matter is the set of events, which chronology takes from the historian. Form is a proof of the dating based on certain clues, which the historian learns from the chronologer. The historian inquires in detail into the cause, nature and order of the event, and the more historically he does this, the more praise he receives. But he ignores the proofs for dating, or touches on them at most, and that rarely... The chronologer, for his part, only touches on the events, because he wants the reader in search of detailed accounts to find them in the historians. But he inquires in a subtle and meticulous way into dates: that is why astronomical demonstrations are relevant here. 10

As the elder Vossius made clear, the discipline of chronology dealt – and deals – with a precise set of questions. It investigates the nature of ancient and modern, eastern and western calendars and establishes the dates of great events. It was and is a complex, interdisciplinary form of inquiry.

⁸ Ibid., LIII-LIV.

⁹ The fullest treatments to date of early modern chronology are Rossi, *Dark Abyss of Time*; Grafton, *Scaliger II*; and the excellent recent work of Steiner, *Die Ordnung der Geschichte*.

^{10 &#}x27;Nempe duo hic attendimus: materiam et formam. Materia sunt res gestae, quam chronologia accipit ab historico. Forma est temporis ex certis indiciis demonstratio, quam historicus discit a chronologo. Historicus fuse exsequitur rei gestae caussam, modum et ordinem; eoque laudatior est quo id magis stylo fecerit historico. Sed probationes temporum praeterit; vel eas solum delibat, idque raro'; 'Chronologus igitur tantummodo tangit res gestas; quia fusius eas peti vult ex historicis: verum subtiliter et enucleate inquirit in temporum rationem; ut huc pertineant ἀποδείξεις ἀστρολογικαί (G.J. Vossius, *De artium et scientiarum natura ac constitutione*, 136). On Vossius' work in history and chronology see the fine study of Wickenden, *Vossius and the Humanist Concept of History*.

The chronologer wields the tools of philology, analyzing historical narratives in order to determine which of them deserve credence on particular points. But he or she must also understand enough basic solar and lunar theory to grasp how different calendars work. More important, the chronologer must regularly connect the data of astronomy with those of the texts, since identifiable eclipses and other celestial events mentioned in historical narratives provide the firmest dates we have for anything that happened in the past.

In the Holland of the Golden Age, chronology seemed a powerful and prestigious form of enquiry. 11 A discipline, as Vossius also noted, that traced its roots to Christian Antiquity, chronology had flourished in recent decades. One scholar in particular, Joseph Scaliger, had brought the discipline to Leiden. He plumbed the secrets of ancient, medieval and modern calendar systems, and used what he learned to date the central events of history. A philologist by early inclination, Scaliger joined the discussion of chronology in the 1570s, just after Copernicus and a number of other astronomers showed that their data could be applied to history. 12 They established precise intervals between a number of dates in biblical, Greek, and Roman history of the eighth century BC and the accession of Nabonassar to the throne of Babylon on 26 February 747 BC. This latter date was crucial, since Ptolemy and almost all later astronomers in the Greek, Islamic and Latin worlds used it as their fundamental epoch. With their methods and data, one could fix precise intervals between era Nabonassar and any later eclipses and conjunctions. When these, in turn, were mentioned in historical records, they fixed the dates of events that fell near them, from the fall of Troy to that of Constantinople, absolutely. Chroniclers, astronomers, and theorists of history all seized upon these correlations between astronomy and history. By 1578, when the book *On Epochs* by the Jena astronomer Paulus Crusius (ca. 1525–1572) was published posthumously, the accession of Nabonassar had become the foundation stone of world history, which resembled nothing more than Barnett Newman's Broken Obelisk: a vast, weighty mass of facts, neatly packaged in geometrical

¹¹ See in general Jorink, Reading the Book of Nature.

¹² These efforts to make chronology precise were, of course, preceded by other, partly similar enterprises: for example, the effort, going back to antiquity and particularly common in medieval culture, to use astrology to provide an explanatory framework for history. See Grafton and Swerdlow, 'Technical Chronology and Astrological History in Varro, Censorinus and Others'; cf. Grafton and Swerdlow, 'Greek Chronography in Roman Epic'.

form and resting, delicately but solidly, on a single point so solid that it could sustain its burden without cracking.

Scaliger mastered the astronomers' data and techniques and applied them even more systematically than those who first devised them. At the same time, he added his own philological methods to the skill set that a chronologer needed to apply. Scaliger detected gaps in the historical record, and managed to fill them by virtuoso feats of scholarly detective work. In many cases, the works of ancient historians who offered vital testimony had been lost. Ransacking the works of Josephus and polemical treatises by the Fathers of the Church, Scaliger collected and evaluated the fragments of the Egyptian writer Manetho and the Chaldean priest Berosus. He performed bibliographical and philological miracles to validate these new texts. Annius of Viterbo (ca. 1432-1502), the brilliant Dominican whose forged histories of the ancient world, published in 1498, outsold Herodotus and Diodorus, had included a fake Berosus and a fake Manetho in his collection. Scaliger – who rejected the Annian forgeries with contempt and treated anyone who accepted them, as most chronologers did, as a fool – had to prove that his own new texts were not fakes. He managed both to accomplish this, and to fit his fragments into a coherent, solid structure - accomplishments that excited his allies and infuriated his critics across Europe. 13

Even before Scaliger came to Leiden in 1593, some scholars in the Low Countries – notably Hadrianus Junius (1511–1575) – had taken an interest in chronology. But Scaliger's example, and the impact of his unofficial teaching and encouragement, won far more interest for the field. Philip Cluverius (1580–1622), who worked with Scaliger in Leiden, specialized in geography rather than chronology. But his brilliant, devastating critique of the ancient accounts of Rome's origins, the legends of Romulus and Remus, rested on the critical method he had honed with Scaliger. The Frisian historian Ubbo Emmius (1547–1625) and his close friend, the astronomer Nicolaus Mulerius (1564–1630), made Groningen a center of technical chronology in Scaliger's style. Mulerius helped Emmius pin down the precise methods for converting dates from one calendar to another, while Emmius helped Mulerius assess the textual evidence

¹³ See in general Grafton, Scaliger II.

 $^{^{14}}$ Erasmus, *The Origins of Rome in Historiography*, 60–67, 106–108; on Cluverius see also Egmond and Mason, *The Mammoth and the Mouse*, 168–184.

for Roman dates and calendars.¹⁵ Even those who did not follow Scaliger so closely recognized his achievement. In 1622 Gerardus Joannes Vossius advised Johann Casimir Junius (d. 1624) to steer clear of Emmius, whom he described as a 'blind follower' of Scaliger.¹⁶ Yet he also clearly stated that Scaliger had brought more to the field than anyone else: 'It would not be easy to describe the great services that this greatest scholar of his time rendered to other forms of scholarship and to chronology. No one else has added so much to this field of study that no other chronologer had pointed out before him'.¹⁷ Gerardus Vossius knew the field. He deftly used years of the Julian period – the period of 7,980 years, beginning in 4713 BC, that Scaliger had devised as an aid to chronologers – in his own study of the chronology of the life of Jesus, which won praise from readers as far away as Rome.¹⁸ In the end, he argued, the substance of Scaliger's accomplishments far outweighed his occasional lapses of judgement:

I do not think that he brought this study to such perfection that he did not leave plenty of questions for his successors to answer. But I do not mind this, since I know – especially when I think about myself – how great is the weakness or ignorance of the human race. It is true that the great man, in his boundless self-confidence, sometimes came to a judgment too rashly. Nonetheless, I am compelled to believe that he deserves the love and admiration of posterity.¹⁹

¹⁵ Mulerius, *Tabulae Frisicae Lunae-Solares quadruplices*; Emmius, *Opus chronologicum novum*; see in general Vermij, 'Ubbo Emmius en de chronologie'.

¹⁶ See Rademaker, *Vossius*, 184. On Vossius' general admiration for Scaliger see above all Wickenden, *Vossius and the Humanist Concept of History*, 204–205 n. 27 and *passim*.

¹⁷ 'Porro haut facile dixerim, quam pulcre ille eruditorum sui seculi princeps, ut de caeteris litteris, ita de chronologia etiam, meritus sit. Non alter plura ad hoc studium attulit chronologis prioribus indicta' (G.J. Vossius, *De artium et scientiarum natura ac constitutione*, 141–142 (142)).

¹⁸ 'Malo periodi Iulianae annis numerare, quam orbis conditi: propterea quod, si rationem ineam a natali orbis, tam incertum relinquam lectorem quam fuerat dudum, idque partim ob annorum dissensum in Bibliorum codd. Hebraeis ac Graecis, partim etiam quia et illi, qui Hebraeos codices sequuntur, tantopere disconveniant; sic ut assignato orbis anno adhuc sis incertus, nisi quaesieris prius quot annos alter numeret ab orbe condito usque ad Christum' (G.J. Vossius, *De annis Iesu Christi dissertatio prima*, 65). For the response of readers in Rome see Allacci to Isaac Vossius, 4 March 1645, in Rademaker, *Vossius*, 313: 'Tractatus patris tui de annis Christi hic maximum in modum et a viris praecipuis laudantur.'

¹⁹ 'Non tamen existimo, sic omnem hanc scientiam exhausisse, ut non multa etiam posterioribus censenda reliquerit. Sed enim eo non offendor: ut qui sciam, praesertim cum me ipsum cogito, quanta sit sive inscitia, sive imbecillitas humana. Quamobrem non aliter mihi possum persuadere quam, utcunque summus vir, sui fiducia, quandoque iudicio fuerit aliquantum praecipiti, nihilominus, ob tot praeclare repetita, dignissimum esse quem omnis amet et admiretur posteritas; eundem etiam maiori in pretio haberi promeritum

Vossius also noted that many chronologers used Scaliger's discoveries but failed to give him due credit.

It is not hard to understand why this forbidding and intractable discipline and its greatest practitioner found a warm welcome in the Low Countries during the Golden Age. Netherlanders were pious. They conned their Bibles endlessly – and many of them found the Old Testament, with its detailed portrait of a holy state, as relevant to contemporary Dutch problems as the New.²⁰ But the Bible's chronology could be confusing, even disturbing, as we will see in more detail later on. Gerardus Vossius recalled that 'I myself have met men who were quite learned, but ignorant of chronology. They called the truth of Scripture into doubt precisely because its dates did not seem to match up.²¹ Scaliger's cutting-edge chronology could in theory reconcile the dates in the Bible both with one another and also with those in Herodotus and with the astronomical data. It offered assurance on central, worrying points of scholarship.

More important, perhaps, chronology was, and always had been, cosmopolitan in its range. The practical problems of trade, politics and warfare that confronted the Netherlanders also forced them to inform themselves systematically about the world, and persuaded their publishers to produce such masterpieces of information retrieval as the Elzevier Republics and the Blaeu atlases. Chronology – with its vast range of information and its neat, lucid frameworks of dates – proved a vital tool for putting all this information into order. Vossius quoted Gerardus Mercator (1512–1594): 'Chronology is, so to speak, a rough sketch and image of history, which lays out the main parts by size, position, and proportion. History polishes and perfects this image. Accordingly, without Chronology, history will be a rude mass of limbs, a monster'.²² Without chronology, in fact, Christians would resemble the Turks, as Augerus Busbecq (1522–1592) described

ab illis qui, ut mihi quidem videtur, nimis dissimulant, quantopere herois illius laboribus fuerint adiuti' (G.J. Vossius, *De artium et scientiarum natura ac constitutione*, 142).

²⁰ See e.g. the classical accounts by Schama, *Embarrassment of Riches* and Van Deursen, *Plain Lives in a Golden Age*.

²¹ 'Ipse etiam in homines incidi, caetera eruditos, sed in temporum doctrina parum versatos, qui non ob aliud aeque veritatem Scripturae in dubium vocarent quam quod tempora in iis non satis viderentur consentire' (Vossius, *De artium et scientiarum natura ac constitutione*, 137).

 $^{^{22}}$ 'Chronologia est velut prima historiae adumbratio et rudis quaedam imago, in qua primariae partes iuxta magnitudinem, situm et proportionem disponuntur; quas deinde perpoliens historia, totam imaginem perficit; ut sine chronologia, confusa membrorum congeries et monstrum plane fiat historia' (G.J. Vossius, *De artium et scientiarum natura ac constitutione*, 137, quoting Mercator, *Chronologia*, sig. (†) 4^{r-v}).

them, and think that Alexander the Great had been the commander of King Solomon's cavalry.²³

From Eusebius to Scaliger, after all, chronologers had written as glibly about Egyptian dynasties as they did about their own rulers, doing their best to negotiate the apparent disagreements of the varied timelines that they wove together. Isaac Vossius followed in this tradition when he gave special weight to the chronological testimony of a cosmopolitan Jesuit, Martino Martini. Vossius even wrote movingly – and evidently on the basis of personal knowledge – about the way that Martini now regarded China, with its uniquely clement climate and high culture, as his home, and hoped to die there.²⁴ In this respect Isaac was doing something very Dutch and cosmopolitan – every bit as much as he did when, as Frans Blok has taught us, he acted as an intermediary with the Blaeu for wouldbe authors.²⁵

Problems in Chronology

Yet chronology caused, as well as allayed, conflicts. For centuries – since late antiquity, in fact – Christian chronologers had done their best to work out exactly when God created the heavens and the earth.²⁶ The task seemed simple enough. The Bible, as all chronologers, ancient and modern, Catholic and Protestant, agreed, was the authoritative source for the early history of the human race. Biblical chronology, moreover, took the most straightforward of forms: a chronicle, generation by generation, of the lives of the patriarchs. But when a chronologer tried to build a firm ladder of dated events on which he could, like one of Jacob's angels, move back and forward between Creation and Incarnation, he had to wrestle with problem after problem, some of them intractable.

²³ 'Hoc dicere de Turcorum narrationibus plurimis possumus, in quibus mira est ἀνιστορησία. Nam neque temporum, neque aetatum habent rationem, omnesque historias miscent et confundunt, ut ait Augerus Busbecquius epist. 1' (G.J. Vossius, *De artium et scientiarum natura ac constitutione*, 137). For the passage in Busbecq's letter see Grafton, *Scaliger* II, 5.

²⁴ 'Chorographiae Sericae interpres, vir minime ineptus, qui multo moderatius de gentis huius virtutibus scripsit quam sensit, rediturus ad Seras nec ipse diffitebatur amicis suis, natale etiam solum exilium sibi videri, et moriturum se cito, nisi moriatur in Seribus' (I. Vossius, *De vera aetate mundi*, XLV–XLVI).

²⁵ Blok, Vossius and His Circle, 215–230.

²⁶ See in general Mosshammer, Chronicle of Eusebius; Barnes, Constantine and Eusebius; Adler, Time Immemorial; Wallraff, ed., Julius Africanus; McKitterick, Perceptions of the Past; Mosshammer, Easter Computus.

Take a simple, early case: establishing the exact date of Noah's Flood. The task seems simple. Genesis lists the patriarchs and states how old each one was when he begat his son. Simple addition of these ages should yield a firm date for the interval between Creation and Flood – and in fact did so for the many scholars who accepted the standard interval of 1656 years. Anyone who looked up the first age of human history in the Catholic chronology of Giovanni Maria Tolosani (ca. 1471–1549) or the Protestant one of Theodore Bibliander (1504/9–1564) would have found exactly the same table, drawn from Genesis 5:

When Adam begat Seth he was 130
When Seth begat Enos, he was 105
When Enoch begat Caynam, he was 90
When Caynam begat Malaleel, he was 70
When Malaleel begat Iareth, he was 65
When Iareth begat Enoc, he was 162.
When Enoc begat Mathusaleh, he was 65
When Mathusaleh begat Lamech, he was 187
When Lamech begat Noah, he was 182
But the Flood was in the time of Noe, after six hundred years.
The sum of these is the aforesaid number, 1656 years.²⁷

Those who compiled these tables followed a tradition that went all the way back to the first systematic Christian chronology, compiled by Julius Africanus in the third century AD:

Adam, when he was 230, begot Seth. And after living another 700 years, he died (that is a second death).

Seth, when he was 205, begot Enosh: from Adam, then, up to the birth of Enosh, there is a total of 435 years.

Enosh, being 190, begot Kainan.

Kenan, at age 170, begot Maleleël.

Maleleël, at age 165, begot Jared.

Jared, at age 162, begot Enoch.

Enoch, being 165, begot Methusaleh. As one pleasing to God, he lived another 200 years and was not found.

Methusaleh, when he was 187, begot Lamech.

Lamech, being 188, begot Noah.28

 $^{^{27}}$ Tolosani, Opusculum de emendationibus temporum, 15°; cf. Bibliander, Temporum a condito mundo, 40–41.

²⁸ Africanus, *Chronographiae*, 26–27 (F16). Scaliger found this fragment in Syncellus, *Ecloga Chronographica*, 91–92; Idem, *Chronography*, 116.

True, Africanus provides different numbers of years than his Renaissance successors did - a point to which we will shortly return. But the framework is clearly identical.

Once the chronologer reached the Flood, moreover, his path seemed clear. Noah entered the ark, which served as a type of God's church, in the second month and seventeenth day of his 600th year. The rain continued for 40 days and nights, the waters covered the earth for 150 days, and then decreased for 150 days, and the ark came to rest in the seventh month. After waiting and sending out his two doves, Noah finally emerged on the seventeenth day of the second month of his 601st year. Everything seemed straightforward.

Yet problems hovered like harpies around what seemed the most basic epochs of biblical history. Compare the two lists quoted above, and their numerical differences stand out as sharply as their substantive similarities: Africanus makes most of their patriarchs produce their sons a century later than his Renaissance successors. Tolosani and Bibliander followed. respectively, the Latin Vulgate and the Hebrew text of Genesis. Africanus, by contrast, followed the Septuagint. The Jewish translators who produced this version lengthened the interval between the birth of each patriarch and that of his son. Perhaps they followed an earlier Hebrew text; perhaps they changed the numbers in response to the Egyptian and Chaldean claims to great antiquity that circulated in Alexandria, where the Septuagint took shape. What is known for certain, however – and what has been known ever since Origen, in the third century, produced his Hexapla, a polyglot Bible in six columns – was that the Greek text and the Hebrew text differ irremediably. The interval between the Creation and the Flood, in the Septuagint version, lasted 2262 years, 606 years, more or less, longer than the 1656-year Hebrew version of primeval history. Further discrepancies piled up between the Flood and the Incarnation. Eusebius was so impressed by these differences that he admitted, in his Chronicle, that he could not draw up a single, absolutely reliable timeline from the Creation to the present. Accordingly, he began his tables from the time of Abraham and the beginning of the Assyrian monarchy, after the Flood, following the Septuagint for later periods.²⁹ Jerome, who translated the Chronicle into Latin, omitted the first book, in which Eusebius discussed these problems and laid out the different chronologies. Still, the basic differences between the versions were well known in the Latin West from the fifth

²⁹ Grafton and Williams, Christianity and the Transformation of the Book, 133–177.

century on. Jerome, Augustine, Bede and many other authoritative writers discussed them.³⁰

Jerome's Latin adaptation of the *Chronicle* circulated widely in manuscript in the Middle Ages and Early Renaissance, and did much to determine the shape of early world histories. In the realm of political theology, for example, the Septuagint chronology, according to which the world was about 5200 years old at the Incarnation, inspired Charlemagne to arrange his coronation in 800, and thus represent himself as an eschatological monarch.³¹ More than one neat new edition of Eusebius/Jerome and later chronicles, laid out in lucid tabular form and equipped with indices and notes, came from the presses, offering reassurance that chronology posed no serious problems.³²

Yet the invention of printing – often credited with introducing a new sense of order into scholars' lives and works – sometimes had the reverse effect. The most popular chronological work of the second half of the fifteenth century, Werner Rolevinck's *Fasciculus temporum*, inadvertently recreated the approach taken by Eusebius long before. Rolevinck (1425–1602) began by noting the insoluble conflict between the two biblical texts and their chronologies. Following thirteenth-century precedent, he laid out his timeline on two distinct axes, one calibrated forward from the Creation and one backward from the Incarnation – the latter, presumably, for the use of those who did not, as he did, follow the Septuagint.³³ The more than thirty editions of the *Fasciculus* that appeared by 1500 made clear to hundreds of readers that the two principal versions of the Bible offered conflicting chronologies.

Anyone who sought to lay out the period from Creation to Flood, in other words, had to confront, at some level, one problem as ugly as it was

³⁰ Cf. Augustine *City of God* 16.10 and 18.42–44, with Jerome's explanation, quoted by Vives in his note on Augustine *De civitate dei* 16.10 (Basel 1522), 455: 'Sciendum quod usque ad Diluvium, ubi in nostris codicibus ducentorum et quod excurrit annorum genuisse quis dicitur, in Hebraeo habet centum annos et reliquos qui sequuntur'; the two men also corresponded on the authority of the different texts. For Bede, who followed the Hebrew chronology, see *De temporum ratione*, praefatio (in Idem, *Opera de temporibus*, 175) and *Epistola ad Pleguinam*, ibid., 309. For discussion of the longer chronology of the Septuagint see e.g. Wacholder, 'Biblical Chronology'.

³¹ See McKitterick, Perceptions of the Past.

 $^{^{32}}$ See esp. the editions published by Henri I Estienne, Paris, 1512 and 1518, which have an exceptionally detailed index, reconfigured from an earlier edition by Jehan de Mouveaux.

³³ Klempt, *Säkularisierung*; Von den Brincken, 'Beobachtungen zum Aufkommen der retrospektiven Inkarnationsära', 5–6.

unavoidable: the Bible's testimony was uncertain. As technical chronology developed in the later sixteenth and early seventeenth centuries, flocks of chronologers swarmed around questions long noted by biblical commentators. Soon it became clear that the whole text of Genesis – and the story of the Flood in particular – swarmed with difficulties for them. Every scholar who bravely entered the field, planning to clear it of rocks and brambles and lay a straight path from the Creation to the Flood, ended up sowing it, like a scholarly Cadmus, with a whole new crop of exegetical dragon's teeth. From these new difficulties sprang up to confront the next chronologer along.

One problem was posed by Josephus, the Jewish historian, who enjoyed enormous respect in the Christian world.34 A well-educated Jew who served as a general in the Jewish war against Rome and lived to tell his people's tale, Josephus knew Jewish texts and customs in their original forms, but wrote in Greek, at first with the help of translators, for a larger Roman public. In his Against Apion, a polemical work against a Greek grammarian, he gave a forceful demonstration that the works of Moses were older, as well as more profound, than any surviving works by pagans. And in his Jewish Antiquities, so he claimed, he described for Greek and Roman readers 'what is contained in our records, in the order of time that belongs to them; for I have already promised so to do throughout this undertaking; and this without adding any thing to what is therein contained, or taking away any thing therefrom.'35 In the same passage in which Josephus professed his absolute fidelity to the biblical record, he remarked that 'our sacred books... contain in them the history of five thousand years' - clear evidence, confirmed by later passages, that he generally followed the Greek version, with its longer chronology. But when he wrote against Apion, he noted that the interval between the Creation and the death of Moses 'was little short of three thousand years' – an equally clear reference to the Hebrew text and chronology.³⁶ When it came down to details – as in Josephus' own treatment of the life spans of the patriarchs – he deviated from the Septuagint as well. It did not take deep learning to note – as the anonymous corrector who equipped a 1580 edition of Josephus in Latin with chronological notes did – that the author's 'compu-

³⁴ The studies collected in Feldman and Hata, eds, *Josephus, Judaism and Christianity*, illuminate many facets of Josephus' reception and reputation.

³⁵ Josephus, Jewish Antiquities pref. 3 (tr. Whiston).

³⁶ Josephus, *Against Apion* 1.8 (tr. Whiston).

tation does not precisely match the Hebrew and the Seventy Translators'.³⁷ In fact, Josephus cited the Bible so inconsistently that it remains unclear even now which version or versions of the text he used.³⁸ Early modern readers responded to these inconsistencies in radically different ways: if Cesare Baronio (1538–1607), the great Catholic church historian, branded the Jewish writer as incompetent, Isaac Casaubon (1559–1614), the great Huguenot Hellenist who refuted Baronio, defended Josephus' work as a treasury of learning, vital to Christian scholarship.³⁹

More unsettling than Josephus' inconsistencies was the appearance of a third ancient chronology. This in turn rested on a third version of the Pentateuch itself – one written in the Hebrew language, but in the Samaritan alphabet. From the mid-sixteenth century, when Guillaume Postel (1510–1581) described Samaritan writing as he had seen it inscribed on coins in Palestine, scholars began to infer that this was the original Hebrew alphabet. Following Jerome, many argued that Ezra had introduced the square-character alphabet used in medieval and modern times when he recreated the Pentateuch after the Babylonian Exile. Patristic tradition recorded the existence of a Samaritan text of the Old Testament, and Scaliger and others eagerly looked for it.

Even before the Samaritan Pentateuch materialized, moreover, a distinctive Samaritan chronology of the earliest period reappeared on scholars' desks. Eusebius had included in the first book of his *Chronicle*, which Jerome did not translate, the Samaritan as well as the Greek and Hebrew dates. They proved distinctive: the Samaritan chronology for the period from the Creation to the Flood was 349 years shorter than the Hebrew, to say nothing of the Greek. Yet Eusebius remarked that 'the Hebrews acknowledge' this version 'as both true and original. Scaliger discovered Eusebius' lists of Samaritan dates and his comments in the Byzantine chronicle of George Syncellus (d. after 810), and he printed them, in

³⁷ 'Haec computatio cum Hebraeis et septuaginta interpretibus exacte non congruit' (Josephus, *Opera*, 9, on 1.3.3–4).

³⁸ See Feldman, Josephus's Interpretation of the Bible.

³⁹ Baronio, *Annales ecclesiastici* I, 28d, on Josephus' 'portentosa mendacia'; Casaubon, *De rebus sacris*, defending Josephus, 'cuius amor veri notissimus, fides constantissima, nisi quid illi fortasse humanitus errare contingat' (27; see also 118, 136–137, 178, 184, 186, 193, 194, 205, 206, 207, 248, 578).

⁴⁰ See e.g. Shalev, 'Sacred Geography, Antiquarianism, and Visual Erudition'.

⁴¹ Syncellus, *Ecloga Chronographica*, 93–94; Idem, *Chronography*, 117–118. The Samaritan version known to Eusebius set an interval of 1307 years from Creation to Flood.

⁴² Syncellus, *Ecloga Chronographica*, 94; Idem, *Chronography*, 118.

the original Greek, in his *Thesaurus temporum* of 1606.⁴³ After 1616, when Pietro della Valle (1586–1652) brought a copy of the Samaritan recension back from Damascus to Europe, the problems became even more acute – especially when the Catholic critic Jean Morin (1591–1651) insisted on the superiority of the Samaritan text to the Hebrew and Greek forms.

Even darker and more complex problems hovered over the period after the Flood. Genesis 10:22, for example, mentioned that the sons of Shem included Arpachshad. The Gospel of Luke provides, in chapter 3, a genealogy of Jesus. This mentions 'Cainan, the son of Arphaxad, the son of Shem.' (3:36) The Septuagint and Samaritan texts of the Old Testament also mention Cainan at the corresponding point in Genesis, but the Hebrew text does not. Later still, in Joshua and Judges, Kings and Chronicles, internal problems of consistency afflicted even the Hebrew text.⁴⁴ Everyone seriously interested in chronology did his best to make the series of names and numbers match. But every solution involved discounting or correcting some piece of biblical testimony, and everyone who proposed one risked criticism for attacking the authority of Scripture. 45 As the gaps between biblical versions and within the Hebrew Bible opened wider, the proud polymaths who had claimed to stand on the firmest of textual ground as they reconciled the Bible with the pagans turned into disconsolate exiles from felicity, floating out to sea on ice floes webbed with new fissures. Even Scaliger admitted to an ally, late in life, that he could not bring order into the later history of the Israelite monarchy. 'As to the kings of Israel,' he wrote to the Leipzig musician and chronologer Seth Calvisius (1556–1615), 'what man of sound mind would promise that he can assert anything that he could swear to be true?'46 Astronomical dating had enabled Scaliger and others before him to fix some rulers and events from the eighth century on to firm points on their timeline. Before that period, however, it offered no help, while the Bible posed question after question.

⁴³ Scaliger, ed., *Thesaurus temporum: Τῶν χρονικῶν κανόνων παντοδαπῆς ἱστορίας Εὐσέβιου* τοῦ Παμφίλου τὰ σωζόμενα, 3–4, briefly discussed in his *Notae*, Ibid., 242.

⁴⁴ For a review of some of these problems and modern proposals for their solution, see Finegan, *Handbook of Biblical Chronology*.

⁴⁵ For a case in point see Grafton, Worlds Made by Words, 122–123.

⁴⁶ Scaliger to Calvisius, 21 May 1607: 'De regibus Israelis, quis sanus promiserit se aliquid dicere, quod certum esse jurare possit?' (Göttingen, Niedersächsische Staats- und Universitätsbibliothek, Ms. Philos. 103. II, 26).

Responses to Problems in Biblical Chronology

By the time that Isaac Vossius wrote, these problems had become notorious. Everyone who seriously addressed the problems of chronology noted – and most of them tabulated in detail – the different spans of time assigned to the patriarchs in all three principal versions of the Bible.

The Jesuit Denis Petau (1583–1652), for example, addressed the chronology of the Flood in his *De doctrina temporum* of 1627, which was by Isaac Vossius' time the standard manual of the field. He laid out the different chronologies of the patriarchal begettings, and made clear that in doing so he was treading well-explored land: 'The number of years that passed from the Creation to the Flood depends on the series and order of generations set down by Moses. The difference between the Greek ones and the Latin and Hebrew texts is very well known to all... I will tabulate the sums of both, the Greek, that is, and the Hebrew, adding the numbers of the Samaritans and Africanus. Scaliger drew these from George the Monk and inserted them in his Greek Eusebius.'

Petau himself followed the Hebrew numbers, and believed that the Flood had probably happened 1656 years after the creation. But he also noted that

the history of the Flood is obscured by a wide range of difficult problems. First of all, there is the question, what sort of year those ancient Patriarchs used, whether it was lunar, solar, or of yet another kind. And then, when the text mentions the seventh and the tenth months, for example, are these counted from the beginning of the year, or from the Flood... and then there is the difference of the Greek text from the Hebrew and Latin. For the Hebrews and the Latins say that the flood began on the seventeenth day of the second month; the Greeks, on the twenty-seventh. Likewise, all say that it ended in the seventh month, but the Hebrews put this on the seventeenth day, the Greeks and the Latins on the twenty-seventh.

⁴⁷ 'Annorum, qui ab rerum primordio ad Diluvium fluxerunt, numerus ex generationum, quae a Moyse describuntur, serie ac successione pendet. In quo Graecorum ab Hebraeis ac Latinis voluminibus tritum est et vulgare discrimen... Nos amborum maxime summas, Graecorum videlicet et Hebraeorum, in laterculum conferemus, additis etiam Samaritanorum et Africani numeris, quos ex Georgio Monacho collegit Scaliger, et in Eusebiana Graeca coniecit' (Petau, De doctrina temporum II (IX.8): De diluvii epocha, ac primo de annorum ab orbe condito putatione ad Diluvium, 11–12).

⁴⁸ 'Historia diluvii, quam Moyses Geneseos VII et VIII capite describit, quaestionibus variis ac difficultatibus obsita est. Illud enim dubitatur in primis, quae fuerit apud veteres illos Patriarchas anni forma: lunaris, an solaris, an alterius generis. Deinde cum septimus ac decimus, verbi caussa, mensis appellatur: utrum ab anni principio an a diluvio ordinales isti deducendi sint. Adhaec incertum est utrum xl dies, quibus pluvia continuo decidit, in

The problem of Noah's calendar – a standard one in chronology for the last century – remained contentious. Worse still, as Petau admitted, none of the intervals from Creation to the Flood were absolutely certain. Even the Hebrew text, he acknowledged, could not support an absolutely precise chronology: 'it cannot be shown by any certain argument whether the years of the Patriarchs computed in Scripture are to be taken as complete years that come to an end, or as partial [that is, whether the births took place at the ends of the last year in question, or during them]'. In fact, it seemed most likely that 'not all of the Patriarchs begat when the years in question were complete' – which rendered any addition of the begettings even more uncertain. Petau did his best to solve all of these problems, insisting that he was no skeptic, but left his reader in a state of considerable uncertainty.

Catholics knew that in the end the magisterium of the Church would determine what they must believe. Many of them could accept the view that biblical authority was neither firm nor clear – especially on a point that did not affect salvation and damnation. Protestants, who took Scripture as their authority, found it much harder to live with these limitations. But they too laid out the difficulties in works that appeared in the 1650s, and that Vossius certainly knew. Most of them followed the Hebrew text. The elder Vossius, for example, canvassed the problems in his introduction to biblical chronology, posthumously published in 1659 – the same year when his son's pamphlet appeared – by the same firm, Vlacq. He responded to the difficulties with a characteristic mixture of moderation, firmness and respect for patristic authority, rightly cited and expounded:

illis cl contineantur, quibus invaluerunt aquae, secundum quos eaedam paullatim imminutae sunt; an vero separatim numerandi sint. Accedit et Graecorum ab utraque, hoc est Hebraea Latinaque editione diversitas. Nam Hebraei ac Latini initium diluvii statuunt mense secundo, die xvii: Graeci die xxvii. Item desiisse ponunt omnes mense vii; sed Hebraei die xvii; Latini pariter ac Graeci die xxvii' (Petau, De doctrina temporum II (IX.9): De anni forma, quae tempore diluvii exstitit. Refellitur falsa quorumdam ratio; et probabilis adstruitur, 12).

⁴⁹ See the wonderful study by Philipp Nothaft, 'Noah's Calendar.'

⁵⁰ 'Atque hoc in primis, quod antea dictum est, repetendum est animo; nullo ex argumento certo posse colligi, utrum qui anni Patriarcharum in scriptura numerantur, completi sint ac vertentes, an inchoati' (Petau, *De doctrina temporum* II (IX.17): *Ortus Arphaxad, et de Cainan insititio.* 20).

⁵¹ 'Διάρθρωσις historiae diluvii, et mensium verisimilis descriptio variis ex formis eligitur, 13: 'Sed ne Scepticorum more dubia in quaestione sic assensum omnem cohibeamus, nihil ut a nobis praeter haesitationem Lector auferat . . .' (Petau, De doctrina temporum II (IX.10).

Given this discord, I follow neither the Samaritans nor the traditions of the Septuagint, but the Hebrew texts – with which the Aramaic paraphrase [the Targum] agrees on some points. I know that in former times many preferred the Septuagint. They included Augustine, who went so far as to criticize Jerome for taking more account of the Hebrew language. But that great bishop of Hippo rightly changed his view later on. 52

In 1655, another Protestant, Louis Cappel (1585–1658), whose critical work on the Masora Isaac respected greatly, had done his best 'to lay out the computations of the Samaritans and the Septuagint, and to reconcile them with that derived from the original Hebrew text'.⁵³ He drew his materials, as he explicitly said, from Scaliger. And he concluded, with absolute firmness, that the distinctive chronology of the Septuagint had been deliberately introduced, either by the translators or a later 'Corrector.' Worried that the patriarchs attained virility too early, given their long life spans, the person or persons unknown who changed the Bible's original chronology did so in order to rationalize it. The chronological variants that appeared in both the Septuagint and Samaritan – and that had no counterparts in the Hebrew – confirmed that these versions had been subject to deliberate alteration.⁵⁴

James Ussher (1581–1656), whose massive work on biblical chronology reached Isaac Vossius while he was still working for Christina of Sweden, espoused the same view, and in even more polemical fashion.⁵⁵ Though Ussher took pride in the fact that he been an early student of the Samaritan text, he rejected the idea that either the Samaritan or the Greek Old Testament could claim more authority than the Hebrew. In a letter published in 1655, with which Vossius was familiar, Ussher told Cappel that

^{52 &#}x27;Porro in hoc dissensu neque sequimur Samaritas neque παραδόσεις τῶν ἑβδομήκοντα, sed codices Hebraeos; quibusdam etiam consentit paraphrastes Chaldaeus. Scio multos olim protulisse LXX. In his etiam Augustinus, qui ne quidem dubitavit Hieronymum reprehendere, propterea quod Hebraei sermonis rationem magis haberet. Sed merito postea magnus ille Hipponensium antistes sententiam mutavit' (Vossius, *Chronologiae sacrae isagoge*, 39).

⁵³ 'Calculum τῶν LXX. et Samaritanorum, quantum fieri potuit, cum eo qui ex originario textu Hebraico colligitur, compono et concilio, non omnino forte infeliciter' (Cappel, *Chronologia sacra*, in Walton, *Biblicus apparatus*, 1).

⁵⁴ Ibid., 2–3, repeated in Cappel, Commentarii et notae criticae, 358–359.

⁵⁵ See Isaac Vossius to Ussher, s.d.: 'Redditum est ante biduum S. Reginae opus tuum Chronologicum, vir illustrissime... Biduum tantum effluxit spatium quod id ad manus ejus pervenit, plurimum vero praeterijt temporis, ut aestimo, ex quo nullum ei tam carum contigit munus. Placuit ei supra modum cum ipsius operis ordo et oeconomia, tum etiam illud quod res Aegyptiacas et Asiaticas a nemine hactenus in unum redactas diligenter adeo et copiose tradideris' (AUB, Ms. RK VI F. 28, pp. 38–39, draft).

the divergent intervals of years in the Samaritan Genesis obviously did not result 'from carelessness, or from the points at which the Hebrew text that the translator used differed from ours, but were introduced by a deliberate choice, and arbitrarily, by that wicked charlatan'. ⁵⁶ As to Josephus, Ussher noted that he had failed to carry his promise to translate the Old Testament, 'without removing or adding anything, with completely honesty'; rather, he had made as many alterations in the text as the Jesuit Jerome Xavier (1549–1617) had when he translated the Gospels into Persian for Akbar the Great.⁵⁷ No wonder then that the Archbishop – who believed, as everyone knows, that he could fix the date of Creation and the interval between it and the Incarnation, to the year, month, day and hour – railed against Petau, who had laid out the problems so elaborately. Ussher insisted that since 'The Holy Spirit set out to establish a chronology here for the earliest times, for which there was no other source. We will miss our goal if we do not take the years when the Fathers begat their sons as more or less complete'.58 But only this rather desperate hermeneutical assumption – not any textual evidence – underpinned his own chronology, which, he had to admit, remained no more than a theory.

⁵⁶ Ussher to Cappel: 'Quae non ex negligentia, aut Hebraici quo ille usus fuerat codicis a nostro variatione, sed ἐκ προαιρέσεως et mera libidine a nefando impostore admissa fuisse, res ipsa clamitat' (Ussher, *De Graeca septuaginta*, 217). For Vossius' familiarity with this text see his notes for a reply to one or more critics, in AUB, Ms. RK VI F. 29, p. 80: 'Cum scriptum Usserij de LXX interpretibus non sit ad manum, exacte affirmare non ausim qualisnam eius de duplici istac quam supponit versione fuerit opinio. Interim hoc scio: sententiam eius nullis testimoniis vel argumentis ab eo posse stabiliri, et clarissimum virum d \lceil ominum \rceil Valesium libenter hac in parte mihi assensurum'.

⁵⁷ Ussher to Cappel: 'De ipso quoque Iosepho non est illud praetereundum quod ex sacris Hebraeorum literis Origines suas translaturum se est pollicitus, neque subtrahendo quicquam neque addendo, id eum pari fide non praestitisse. Eodem enim consilio quo Persis nuper Hieronymus Xaverius Iesuita interpolatam a se Evangelicam dedit Historiam, etiam Graecis ille rerum in Vetere Testamento gestarum transmisit memoriam: nonnulla quae erant in Canone supprimens, alia (ut quum Salomoni, verbi gratia, pro 40 regni annis 80 tribuit; et in numero talentorum argenti ad Templi usum a Davide relicto I Chronic XXII.14 centum millia pro mille millibus substituit) immutans, atque ex scriptis apocryphis non pauca adiiciens, uti in eius de Mose trienni [in *Jewish Antiquitites* 2.9.60, Josephus states that Moses had attained 'wondrous stature' at the age of three], de eodem iuvene cum Aethiopibus bellum gerente [Ibid., 2.10], de Tharbi regis Aethiopum filia connubium eius expetente [Ibid., 2.10.2], et aliis eiusdem farinae narrationibus licet perspicere' (in Ussher, *De Graeca septuaginta*, 214).

⁵⁸ 'Cum igitur Spiritui sancto fuerit propositum, numerum annorum primaevi mundi (qui aliunde sciri non poterat) hic colligere: a primario illius scopo aberraverimus, si non annos Patrum, quibus genuerunt filios, plus minus completos intelligamus...' (Ussher, *Chronologia sacra*, 18, following La Grange, *Isagoge chronologica*, col. 164).

Still, Protestant opinion on the issues was not uniform. Brian Walton (1600–1661), who edited the London Polyglot Bible of 1653–1657, included in it biblical versions in several languages.⁵⁹ He also reprinted Cappel's chronology, which followed the Hebrew text, as we have seen. But in his own detailed prolegomena, which rested on his examination of the full original texts, he took a different position. Josephus, Walton noted, 'drew his history from the archives of the priests, since he himself was a priest... and he often notes that he took his materials from the sacred codices, just as he found them. But his chronology comes closer to the Greek, than to that found in the Hebrew manuscripts'. In Walton's view, the fact that a Jewish priest adopted these readings proved that 'the readings of the Hebrew manuscripts also varied in those days'.⁶⁰

Walton found other grounds as well for doubting the chronological reliability of the Masoretic text. He believed, for example, that Cainan, the son of Arpachshad, had probably appeared in the original Hebrew text that the Seventy had translated.⁶¹ And he found the shorter chronology of the Hebrew unappealing on rationalizing as well as textual grounds: it left too little time for the development of the Assyrian kingdom and for the growth of the Jewish population in Egypt.⁶² Walton noted with contempt – and a sharp quotation previously drawn by Petau, whom he mentioned, from Horace – that the 'common herd of chronologers' took no interest in problems like these.⁶³ Like Petau, Walton wound up not

⁵⁹ On Walton's Bible see esp. Miller, 'The "Antiquarianization" of Biblical Scholarship'. 60 'Lectionem etiam codicum Hebraeorum olim in his variasse, ex Iosepho colligitur, qui ex archivis sacerdotum, quum ipse sacerdos esset, historiam suam extraxit: Antiq. I. l. 4. et 2 7. et istius libri prooemio, primo contra Appionem, etc. saepius profitetur, se ex codicibus sacris descripsisse, prout invenerat. Huius autem supputatio temporum ad Graecam propius accedit quam ad illam codicum Hebraeorum. Dicit enim se historiam confecisse ab initio mundi, ad eversionem Templi secundi, annorum circa 5000, cum iuxta supputationem Hebraeorum codicum hodiernam, vix 4000 communiter numerentur. Iudaei vero longe a vero aberrant, qui ad annum post Templi eversionem 167, numerant annos tantum 4000 in addit. Talmud. Unde ad natum Christum ex eorum computo fluxerunt anni a mundi condito tantum 3766. In aetatibus patriarcharum ante Diluvium, quas sigillatim recenset, lib. I. Antiq. c. 4. et lib. 4. c.7. multum distat eius computus ab Hebraeo hodierno. Nam ab Adamo ad Diluvium annorum summa est 2253, cum codices Hebraei habeant tantum 1656. Sic in supputatione ante Diluvium cum LXX convenit, at in annis post Diluvium ad Abrahamum usque cum codicibus hodiernis convenit: supputat enim tantum annos 292' (Walton, 'Prolegomena', 347-348).

⁶¹ Ibid., 349-351.

⁶² Ibid., 348-359.

^{63 &#}x27;Haec tamen omnia, quae nisi concedatur calculus LXX prudentioribus ἄπορα videntur, vulgus Chronologorum nil curat, quibus (ut ait Petavius, Chronologorum hujus seculi princeps) 'nil intra est oleum [sic], nil extra est in nuce duri' [Horace, Epistles, 2.1.31], qui

with a firm conclusion, but with a statement of his preference for the Septuagint chronology and an admission that absolute certainty remained elusive – and a quotation to the same effect, derived, strikingly, from the Spanish Jesuit Franciscus Toletus (1532–1596), who had taken a similar stance on the question of Cainan:

We should believe the Evangelist, who states this. It is a lesser risk to say that the extant Hebrew manuscripts have minor imperfections than to insist that an error, or even the smallest lie, appears in the Gospel.' With these words of Toletus I make an end to my discussion of this problem. I do not make a final determination *ex cathedra*, but lay everything out for the fair judgment of the reader. And though I find the latter opinion more probable, I am ready to accept better arguments for the former one, if anyone can produce them.⁶⁴

Isaac Vossius' Philological Methods: Scaliger and Gerardus Vossius

By the time that Vossius ran onto the playing field, in other words, the game of sacred chronology had well-established questions, which all players were expected to confront, and well-established rules, which all players were expected to obey. For all Vossius' unwillingness to play in the normal way, it seems certain that these works, and the data, problems, and solutions that they laid out, helped to shape his own maneuvers in the field. In particular, Walton's advocacy of Josephus, preference for the Septuagint and contemptuous dismissal of old-fashioned scholars who could not see the importance of the questions he posed may well have inspired Vossius with at least the first of the thoughts that went into his pamphlet.

Sacred chronology, moreover, could not easily be separated from secular chronology — which had, in the hands of Scaliger and others, done almost as much to call biblical authority into question as to buttress it. In the *Thesaurus temporum* of 1606, Scaliger had published the Egyptian dynasty lists compiled in Greek by the priest Manetho of Sebennytos, writing in the third century BC. These lists had at least one disadvantage, from

nullo se negotio expediunt, cum prudentiores inscitiam suam fateri mallent, quam aliquid falsum, vel absurdum affirmare' (Walton, 'Prolegomena', 349).

⁶⁴ 'Credere enim debemus Evangelistae id affirmanti: minusque periculum est dicere, Hebraica exemplaria ex parte non haberi perfecta, quam asserere in Evangelio errorem, seu mendacium vel minimum reperiri. His Toleti verbis finem huic quaestioni impono, nihil de cathedra definiens, sed omnia lectoris aequi iudicio subiiciens et, licet sententiam posteriorem probabiliorem iudico, paratus tamen, si quis argumenta meliora pro priore attulerit, iis non refragari' (Walton, 'Prolegomena', 351).

the point of view of a normal Christian scholar around 1600: they added up to so many years that according to them, Egyptian history began not only before the Flood (which Scaliger dated from the Hebrew Bible) but before Creation itself. But Scaliger was certain that they were too peculiar to be forgeries. So he published them – and asked his reader to allow him to postulate a period of 'proleptic time,' running the Julian calendar back before the Creation in order to set them into his larger chronological framework.⁶⁵ This decision proved deeply unpopular. Though one or two allies, like the Giessen professor Christoph Helwig (1581–1617), approved of Scaliger's decision, most did not. Even Scaliger's loving admirer Isaac Casaubon noted in his copy of the book that he did not see 'what value these fantasies of foolish peoples had for true history'.⁶⁶ Catholic critics like Petau were far more unkind, and mocked Scaliger's apparent decision to trust the fantasies of boastful pagans over Moses.⁶⁷

Gerardus Joannes Vossius, as he informed readers of his massive, eclectic treatise on ancient mythology, *De theologia gentili*,

was pained to see Scaliger all but accused of impiety for compiling that list of Egyptian kings. After all, they say, if we follow Scaliger, then the authority of Sacred Scripture must collapse. For there was a kingdom in Egypt long before the Flood – indeed, long before the time when Moses teaches us that the world was created. 68

Always committed to negotiation rather than confrontation. Vossius tried to save Scaliger's credibility as a Christian scholar. More surprisingly, he tried to save Manetho's credibility at the same time. The elder Vossius could have argued – as most did – that Manetho had been a typical, boastful pagan, who wanted to show that his people was older than the Jews and simply invented records to prove the point. Instead, he inferred that

⁶⁵ Grafton, *Scaliger* II, 711–720. For a recent discussion of Manetho see Verbrugghe and Wickersham, *Berossos and Manetho*.

⁶⁶ Isaac Casaubon, note in his copy of Scaliger, *Thesaurus temporum* (Cambridge University Library, shelfmark Adv. a. 3.4), at 'Isagogici chronologiae canones', 309: 'Ego non video quae magna utilitas sit ad veram historiam in istis stultarum gentium figmentis. Nam de periodo Iuliana est aliud.'

⁶⁷ See Grafton, 'Joseph Scaliger and Historical Chronology'; Rossi, *Dark Abyss of Time*.

⁶⁸ 'Quae verba summi viri eo lubentius adduxi, quia dolet eum tantum non *asebeias* accusari, ob catalogum illum regum Aegyptiorum contextum. Quippe, aiunt, si Scaligerum sequamur: corruere Sacrarum literarum auctoritatem, quia sic ante Diluvium in Aegypto fuerit regnatum, imo multo ante illud tempus, quo Moses docet mundum hunc creatum' (G.J. Vossius, *De theologia gentili*, 79). On Vossius' theories about ancient myth see Gruppe, *Geschichte der klassischen Mythologie*, 47–50; Allen, *Mysteriously Meant*, 68–69, and above all Häfner, *Götter im Exil*, 224–248.

Manetho had done his best to translate the genuine records of ancient Egypt from the hieroglyphs on stone columns. But the priest had misunderstood what he read. Each Egyptian dynasty was identified, in Manetho's list, with a city: This, Thebes, Elephantine. Manetho, Gerardus Joannes Vossius argued, simply failed to realize that these dynasties had ruled different sections of Egypt at the same time. A simple thought experiment made clear that Manetho could not have set out to deceive his patrons deliberately. Manetho's and Scaliger's critics, he wrote,

think they have found an easy way to untie the knot: they say that Manetho fooled Ptolemy. But he wrote to the king that he had taken those records from the Seriadic columns and other monuments in hieroglyphs. If he had deceived the king, other priests would have refuted him, if only to win the king's favor. Those who want to do themselves good, rather than others, are always in good supply. Accordingly, I think that Manetho copied his sources with perfect accuracy. But, like the other priests, he was misled by the obscurity of very ancient times. For he thought that the dynasties he recorded in his first book all succeeded one another. In fact, many of them, as the saying goes, were not successive but collateral: that is, they existed in different places at the same time. ⁶⁹

As to Scaliger, Gerardus Vossius good-heartedly but implausibly took the fact that he had recognized one Theban dynasty as collateral to show that he did not believe the Egyptian dynasties listed by Manetho were really successive:

Scaliger did not believe this. He only held, as I do, that those Egyptian dynasties were not fictitious. The fact that he computed that the Egyptian dynasties lasted for 5,353 years is not an objection. For he said this following the opinion of Manetho and the Egyptians.⁷⁰

⁶⁹ 'Facile quidam hunc sibi nodum exsolvere videntur. Quippe Manetho aiunt fucum fecisse Ptolemaeo. Sed enim scribebat regi se ista hausisse ex columnis Seriadicis atque aliis monumentis hieroglyphicis. Ubi si falleret, redarguissent eum sacerdotum alii: si non ob aliud, saltem ut sic gratiam sibi regis conciliarent. Nunquam enim defuere qui sibi bene esse mallent quam alteri. Quamobrem existimo, Manetho quidem optima fide exscripsisse ista unde profitebatur, sed in eo cum sacerdotum aliis, ob antiqui temporis tenebras, aberrasse, quod, quas primo tomo dynastias refert, eas putarit alias aliis semper successisse, cum multae, ut loquuntur, non successivae fuerint sed collaterales – hoc est, eodem tempore diversis fuerint locis. Nec enim primitus per Aegyptum universam rex unus tenuit imperium, sed varii fuere reguli, alii aliis maiores. Ita initio imperarint simul, tum Thinitae, quorum prima et secunda statuitur dynastia, tum Memphitae, quorum dynastia est tertia, et quarta, tum Elephantini, quorum dynastia est quarta [quinta?]...' (G.J. Vossius, De theologia gentili, 79).

⁷⁰ 'Atqui non hoc censet Scaliger: tantum voluit, quae et nostra opinio est, dynastias istas Aegyptias non esse commenticias. Neque obstat, quod tandem colligat, annos dynas-

Gerardus Joannes Vossius was wrong about Scaliger, and his attempted defense of his predecessor was unusual. But his engagement with earlier scholarship was standard practice. The landscape of secular chronology was densely overgrown with thickets and brambles, and the safest way to navigate it was to make clear at every point that one had mastered the existing literature and could show that one's own new hypotheses did not contradict the best older ones.

In some ways Isaac Vossius, as a chronologer, followed his father's lead. Martini made clear that he trusted the Chinese annals, even though they began before the Flood, because the evidence of astronomy confirmed them. Accurate records of eclipses and solstices showed that the Chinese genuinely had a continuing calendar cycle and continuous records of their kings that went back for thousands of years. Vossius repeated Martini's general remark that the early Chinese 'had letters, moral philosophy, and especially mathematics, as their very ancient observations of the stars also clearly show'.71 But he did not emulate Martini's use of astronomical evidence for chronological ends. In practicing chronology as a non-technical discipline – and in treating astronomy as a sort of black box, which could confirm historical arguments, and even the veracity of Scripture, but which the chronologer himself need not understand – Isaac imitated Gerardus. In his survey of the field, Gerardus noted, with characteristic frankness, that not everyone who knew the uses of astronomy for history could actually compute the date and time of an eclipse. Instead, they looked them up in tables. But the tables also disagreed. True, a general consensus identified certain tables as reliable.⁷² But Gerardus Vossius still expressed his general skepticism: 'This science depends on the

tiarum Aegyptiarum conficere summam annorum quinquies mille trecentorum quinquaginta trium. Hoc enim dicit ex sententia Manetho et Aegyptiorum, qui annos istos habebant pro explicitis. At non ita Scaliger, qui credebat eodem tempore a variis esse diversis in locis imperatum, imo quandoque etiam in eadem provincia, ut alius in Urbe imperaret, alius in agris' (G.J. Vossius, *De theologia gentili*, 79).

⁷¹ 'Iam tum illi literas, philosophiam quae ad mores pertinet, et mathematicas scientias imprimis habuisse feruntur, quod et antiquissimae siderum observationes abunde ostendunt' (I. Vossius, *Castigationes*, 39, quoting Martini, *Novus atlas sinensis*, 1).

^{72 &#}x27;Nec enim omnes, qui astrologiam didicerunt, usque adeo in hac scientia sunt subacti, ut per se motus videant caelestes. Ad tabulas igitur astrologicas recurrunt. Nec inficior, dissentire tabulas:... Verum non tacito eruditorum consensu convenit, haberi nunc tabulas certiores quam olim. Haut nego posse et deinceps incrementum huius scientiae fieri. Sed enim, ut in temporum minutiis scrupulus aliquis porro supersit, ratio tamen in maioribus constabit' (G.J. Vossius, *De artium et scientiarum natura ac constitutione*, 136–137).

observation of the heavens at many points. But astronomical computation still has many difficulties'.⁷³

Even when Gerardus tried to work with astronomical data, he made clear that he himself was one of the many who had no expertise in this difficult field. The Jesuit Johannes Deckers (1560–1619) and the great Protestant astronomer Johannes Kepler (1571-1630) had argued, in the 1610s, that Jesus must have been born much earlier than 1 BC. Herod, after all, had been trying to kill Jesus when he massacred the Holy Innocents. Hence, Jesus must already have been two or three years old when Herod died. But according to Josephus an eclipse of the moon visible at Jerusalem had taken place before Passover in the year when Herod died, and computation identified this eclipse as one that took place on 12/13 March 4 BC. Jesus, accordingly, must have been born in 6 or even 7 BC.⁷⁴ Gerardus disliked this hypothesis, mostly because it went so sharply against tradition: 'How implausible it is that all the doctors of the church went wrong before now in setting the year of Christ's birth!'75 Accordingly, he rejected their arguments, though he too set the date before the traditional era of the Incarnation. But the only evidence he could find to give against that of Kepler's eclipse was to argue that it might have been some other form of celestial event that made the moon seem pale, and to claim, giving no details, that no eclipse in fact matched the description in Josephus.⁷⁶ When Martini argued that early Chinese chronology was credible, he explicitly pointed out that astronomical observations earlier than any made by Europeans corroborated them – an argument that went to the heart, as we have seen, of chronological scholarship.⁷⁷ Nowhere in

⁷³ 'Cuius inter alia ea est caussa, quod scientia haec in multis dependeat a coeli observatione: at calculus astronomicus multas adhuc habeat difficultates' (Vossius, *De artium et scientiarum natura ac constitutione*, 54).

⁷⁴ Grafton, Worlds Made by Words, 124-128.

⁷⁵ 'Quam enim parum credibile est, omnes ecclesiae doctores aberrasse antea in vero natali adsignando!' (G.J. Vossius, *Tractatus theologici*, 76).

⁷⁶ Ibid., 76–77.

^{77 &#}x27;Tradunt ab eo Kalendarium toto regno publicatum receptumque. Scripsit etiam ephemerides quinque planetarum, quos, dum imperabat, omnes in caelo coniunctos vidit eo die quo est observata solis et lunae coniunctio. Et hunc diem primum illius anni esse voluit, prout author Sinicarum rerum in constellatione XE dicta indicat; quae nunc circa gradum decimum octavum Piscium incipiens ad quartum usque Arietis extenditur. Fortassis haec est illa planetarum celebris in uno signo coniunctio, quam asserunt Europaei chronologi Noetica aetate fuisse. Quid ad haec illi qui annos retro pauciores ad Diluvium Noeticum numerant dicturi sint, nescio. Quid ego sentiam, tum docebo, cum res ab YAO Imperatore gestae dicendae erunt, ubi de diluvio agetur prolixius. Interea nolim arrogare tantam Sinicis scriptoribus fidem, quae nos cogat opinionem illam mutare quae

his many efforts to defend Martini's work did Vossius mention – far less discuss in detail – these arguments.

But the resemblance between Isaac's method and his father's is closer than a mere common aversion to astronomy. It goes to the very center of their work and its implications. When Isaac Vossius set out to destroy the credibility of the Hebrew text, he too performed thought experiments. If the numbers in the Masoretic Text deserved credence, he noted, then Noah had survived until the 58th year of Abraham. But that was impossible – for no one even mentioned the astonishing fact that this great man had survived through the next eleven generations. 'Clearly, if that author of the whole human race had still been alive in those times, then the pagans' annals would have been full of this miracle. But Moses himself would not have left it out either'. 78 Note the reasoning here: Vossius argues not from what he found in the sources but from what he did not find there: knowledge of human nature, presumably drawn from parallel instances, enables him to determine that a given event did not take place. Similar patterns of argument appear elsewhere as well – as when, at the end of the book, after having shown that the Flood could indeed have wiped all of humanity, Vossius argued that God had actually wiped out only the small part of the world that was inhabited. In this case knowledge of divine nature enabled him to work our what had happened: 'Deus non facit miracula frustra'. ⁷⁹ God would not have poured water, pointlessly, on uninhabited parts of Asia and Africa.

Isaac's method seems radical – the natural one for a freethinker who valued human reason more highly than any text, including the Bible. Yet, as we have seen, he shared it with Brian Walton, no freethinker. And he probably learned it from that notorious traditionalist, his father. When Gerardus wanted to show that Manetho had used real records, as we have seen, he imagined what court life would have been like in his time, using that of his own day as his standard: forgery would have been exposed by

breviorem diluvii historiam facit. Aio tamen hanc omnino primam esse stellarum observationem, de qua quidem conveniat inter authores. Quid ad haec Europaei nostri? Ego sane assevero me in historia Sinica hanc, de qua dixi, observationem in istius imperatoris actis invenisse. Et hanc gentem adhuc barbaram vocabimus, quae iam tum adeo fuit exculta, cum nondum Europae nomen exstaret?' (Martini, *Sinicae historiae decas prima*, 21–22 (on Cheunhious)).

⁷⁸ 'Sane si istis temporibus inter vivos etiamnum extitisset ille universi generis humani auctor et princeps, pleni essent gentium annales de hoc miraculo. Sed nec ipse hoc pretermisisset Moses' (I. Vossius, *De vera aetate mundi*, XVII).

⁷⁹ Ibid., LIII.

rivals. When Gerardus needed to prove that Egypt's dynasties had originally ruled parts of the country, not the whole, he had no textual evidence to go on. So he resorted to a conjectural history, based on comparison:

If anyone finds this hard to accept, let him consider that all great empires have come together as wholes from several smaller units. Not to mention ancient Assyria, everyone knows that before the Persian empire there were first the different Medean, Babylonian, Assyrian, and others. How many empires did the Macedonian swallow? How many did Rome? Into how many kingdoms was Spain originally divided? And only think of Britain and Gaul. Our Netherlands once consisted of a great many duchies and counties, which finally yielded to the Burgundians and then to the Austrians. If you compute the years of the Hollanders, the Hannonians, the Bavarians, the Burgundians, and the Austrians separately because they recognized only one monarch, then by the good Lord, the sum of years will be far greater than the correct one!80

The materials Gerardus assembled here were not his own: he no doubt found them in a comparative historical or political writer like Bodin or Botero. But the twist he put on them was distinctive: like his son after him, he used his knowledge of human nature and asked not what the texts said but what must have happened.

There was nothing especially original about this conjectural method. Lorenzo Valla (ca. 1406–1457) had used it almost two hundred years before. In his treatise on the Donation of Constantine Valla asked what would have happened if the emperor had really given his empire to the church. The historian Eutropius narrated the history of the Roman Empire after Constantine. If the empire had really changed hands, then Eutropius would not have gone on to write about the emperors without ever mentioning the change in their status: 'He would not have kept quiet about a donation of the Western Empire [had it been made], nor a little later

⁸⁰ 'Quod si cui hic aqua haeret, is velim cogitet secum, ut omnia magna imperia ex plurium minorum ditionibus coaluerint in unum. Mitto Assyrium vetus. Ante Persicum quis nescit, primo diversa fuisse Medicum, Babylonium, Assyrium, alia! Quot imperia absorpsit Macedonicum? Quot Romanum! Quot in regna primitus divisa fuit Hispania! Quid Britanniam magnam, quid Gallicam dicam! Belgica haec quot prius ducatus ac comitatus habuit! Qui tandem Burgundis, postea Austriacis patuere. Hic si annos Hollandorum, Hannoniorum, Bavarorum, Burgundionum, Austriacorum, seorsim numeres, quia unum tantum principem agnovere; Deum immortalem, quanto maior iusto annorum summa ex annis hisce implicitis confiet! In hoc igitur Manetho peccavit, quod annos implicitos et explicitos non distinxerit' (G.J. Vossius, *De theologia gentili*, I.28, 79).

would he have said about Jovian, who succeeded Julian: With Sapor he made a necessary peace, but an ignoble one'.81

In each case, the philologist, working in the ancient tradition of rhetoric, asked himself what should properly have happened in a given circumstance. In each case, he took his own knowledge – of parallel texts and comparable institutions, of human and divine nature, of what was probable and appropriate – as the basis for a conjecture not supported by any of his sources: a historical, rather than a philological, act of divination.⁸² But the nature of the cases differed. Valla used the method to attack a document which others had attacked before him (one of them, Nicholas of Cusa, 1401–1464, on similar grounds). Though he criticized an established church practice, he did not direct his fire at a genuinely ancient author. Gerardus Vossius used the same method to suggest a way of reading Manetho which would largely save his credibility – and wholly save that of the Hebrew Bible. Isaac, for his part, also made the same maneuvers – but to radically different effect. His conjectures served to discredit the fantasies of pagans – but also the transmitted text of the Hebrew Bible, which he repeatedly set aside in favor of his mother wit.

Isaac Rebels

In other respects, however, Isaac rebelled. He refused to load his pages with the rich citations in which his father had specialized, and denied any interest in arriving at the sort of certainty that chronology had originally promised, and that Ussher thought he could still attain: 'I cite few writers here,' he wrote in his letter of dedication to Slingeland:

since I know how much you dislike the custom of using unknown and forgotten names to prove the most commonly known points. And I don't go into chronological details here either. I find it absurd when some set down the hours and minutes, even though they could say nothing certain about whole centuries. 83

⁸¹ 'Nec de donatione imperii occidentis tacuisset, nec paulo post de Ioviano, qui successit Iuliano, ita dixisset: Pacem cum Sapore necessariam quidem sed ignobilem fecit, mutatis finibus ac nonnulla Imperii Romani parte tradita' (Valla, *Donation of Constantine* (ch. 31), 50).

⁸² Cf. Eden, Hermeneutics and the Rhetorical Tradition.

 $^{^{83}}$ 'Non ad multos hic remitto scriptores, praesertim cum sciam, quam tibi eorum displiceat mos, qui res etiam vulgo notas ex ignotis et obsoletis probant nominibus. Sed neque temporum hic colligo minutias, cum ridicule mihi fecisse videantur illi, qui horas

Isaac's rebellion, moreover, entered the realm of substance as well as that of style. Where Gerardus had built bridges, Isaac burned them. Gerardus, as we saw, took a moderate position on the different versions of the Old Testament: 'I will always respect the authority of the Seventy Translators – but as translators, not as if they deserve to be preferred to the agreement of the Hebrew codices, which were written by men who clearly had divine inspiration'.84 Isaac, by contrast, glibly joked that Moses could not even have recognized the Torah if he had seen it in its preserved form, written in an alphabet different from the Samaritan one that he had used and equipped with accents and vowels invented long after his death.85 Gerardus did his best to save ancient records - even when, as in the case of Manetho's dynasties, they were disturbing. Isaac happily jettisoned them. The Chaldeans had claimed a history that went back for half a million years, he argued, because they knew the Israelites and through them had a limited, confused knowledge of the world before the Flood. This they inflated into an imaginary history: 'They were not only familiar to the first patriarchs, but very closely related to them. From them - or also from other sources – they learned something about the longevity of those who had lived before the Flood. But since they did not know the exact length of their lives, they ascribed to them a life far longer than that attested by holy Scripture.'86 As to the Egyptians, they did not even know as much about the real early history of the world as the Chaldeans, but because they envied the latter, they invented an equally venerable ancient history. Manetho, in Isaac's view, was not a capable scholar misled by a wrong assumption, but a rascal who had deliberately lengthened Egypt's chronology: 'though the various little kings and priests in the different nomes or prefectures of Egypt ruled at the same time, he pulled the individual

et singula annotarunt momenta, cum de integris seculis certi nihil adfirmare potuerint' (I. Vossius, *De vera aetate mundi*, dedicatory letter).

⁸⁴ 'Sane gravis apud me semper erit auctoritas LXX interpretum, sed tanquam interpretum; non autem quasi praeferri mereantur consensui codicum Hebraeorum, qui scripti sunt ab hominibus extra dubium *theopneustois*' (G.J. Vossius, *Isagoge*, 95).

⁸⁵ 'Certum quippe est, teste beato Hieronymo, Esdram post captivitatem Babylonicam, Chaldaicas invexisse literas iisque libros sacros descripsisse, neglectis veteribus Hebraicis, quae eaedem erant atque nunc sunt Samariticae. Si itaque revivisceret Moses, ne unum quidem apicem in Iudaeorum libris adsequeretur, cum literas habeant a Chaldaeis, puncta vero et apices a Massoretis' (I. Vossius, *De vera aetate mundi*, VI).

^{86 &#}x27;Nec sane fieri aliter potuit, cum non tantum familiares fuerint primis patriarchis, sed etiam cognatione iunctissimi. Ex illis itaque, vel etiam aliunde, cum nonnihil intellexissent de longaevitate eorum qui ante Diluvium vixissent, nec tamen exacte vitae spatium nossent, factum est ut longe diuturniorem illis vitam tribuerint atque sacrae doceant literae' (Ibid., XXXII).

reigns out of context and devised the long series'.⁸⁷ Gerardus did his best to show respect for Scaliger, even where he disagreed with him. Isaac said little that was respectful about anyone – except Martino Martini.

Seen against the background of his father's work in the same field, Isaac Vossius' pamphlet has the look of a brilliant rebellion, a move from traditional humanism into something like late seventeenth-century radical criticism. Numerous contemporaries believed that the seed had fallen very far indeed from the paternal tree. Narcissus Marsh (1638–1713), that great collector, bitterly complained that 'Whatever Dr. Vossius says, because his name is Vossius, ipse dixit, is enough to make it believed'. In fact, though, if readers would only pay close, critical attention to his work, 'Isaac would not long pride himself with the Plumes, wherewith Gerard's Fame has adorned him'.88 And one facet of the Dissertatio de vera aetate mundi at least supports this view. Isaac Vossius, as his letters show, belonged to a particular scholarly cohort, one that also included Johannes Fredericus Gronovius (1611-1671) and Nicolaas Heinsius (1620-1681). Like them, he looked back with respect to the radical editions with which Joseph Scaliger had transformed the texts of Tibullus, Manilius and other poets. Like them, he had a passion for manuscripts and textual criticism (though his gifts in the field were more limited than theirs). From the days of his grand tour through the Italian libraries and on into his later life as librarian and collector, he endlessly swapped information with them about new manuscripts of ancient texts, a number of which he himself edited.⁸⁹

Textual Criticism and the Bible

Vossius' rich experience as manuscript hunter and textual critic made him aware, in a very direct way, of how much corruption ancient texts had undergone over the centuries, and of the wide range of variants that appeared in their manuscript traditions, once the scholar took the time to survey them with due energy and care. Others interested in history seem to have had less contact with philology – and some responded to outside pressures as well as personal conviction. In the first half of the

⁸⁷ 'Cum diversi reguli et sacerdotes in diversis Aegypti nomis seu praefecturis simul regnarint, ille singulorum spatia separavit, ac sic longam contexuit seriem, annos implicitos in solidos permutans' (Ibid., XXXVIIII).

⁸⁸ Narcissus Marsh to Edward Pococke, 29 April 1680, quoted in Katz, 'Isaac Vossius and the English Biblical Critics', 165.

⁸⁹ See Haugen, Richard Bentley.

seventeenth century, both Lutheran and Reformed theologians insisted, more and more loudly, on a doctrine of literal inspiration - one that many applied to the vowel points and accents of the Hebrew Old Testament as well as to the Greek text of the new. 90 Georg Hornius had clearly taken such views to heart before he read Vossius' pamphlet. Nothing in it enraged him more than Isaac's casual, mercilessly clear statements about the historical contingency and corruption of the Hebrew text. If Vossius were right, he argued, and the translation displaced the original, then terrible consequences would follow. This would mean that the world had 'incorrupt' texts of pagan writers like Homer and Virgil, and corrupt ones of the Scriptures, as if God failed to take providential care for the integrity of what the prophets and apostles had written at His inspiration, and the Jews had done their best to corrupt their own scriptures. 91 For Hornius, the principle of scriptural inerrancy took precedence over all others. Even in his remarkably cosmopolitan, pocket-sized world history, the Arca Noae, into which he packed, with a jeweler's tongue-between-the-teeth precision, Egyptian and Chinese as well as Jewish, Greek, and Roman history, he argued that all pagan history took place after the Flood. To argue that the Hebrew Scriptures were corrupt and the pagan classics intact was simply 'to confound divine things with human'.92

Vossius replied with contemptuous ease: 'Everyone knows,' he wrote, drawing on Joannes Wowerius' work on ancient libraries and textual critics,

that as early as the age of Pisistratus, grammarians and critics worked hard at correcting the errors in manuscripts of Homer. Everyone is acquainted with the obeli and asterisks of Aristarchus, the efforts of Zenodotus, Creates, Aristophanes, both Apolloniuses, and a thousand others, who wrote vast works on variant readings while Greece was still in its heyday. Even in our

⁹⁰ See Christian Ginsburg's introduction to ben Chajim, *Introduction to the Rabbinic Bible*; Schnedermann, *Controverse des Ludovicus Cappellus*; Lebram, 'Ein Streit um die Hebraïsche Bibel und die Septuaginta'; Muller, 'The Debate over the Vowel Points'; Burnett, *From Christian Hebraism to Jewish Studies*.

^{91 &#}x27;Melior scilicet conditio Homeri aut Virgilii erit, quorum codices per tot secula ad nos pervenisse incorruptos statuunt, quam sacrarum scripturarum, quae amissa textus originalis et Hebraei αὐθεντία, omnem integritatem suam non nisi versioni Graecae debeant. Quasi neque Deo, cuius inspiratione acti scripserunt prophetae et apostoli, curae fuerit conservatio earum, et Iudaei hoc praecipue egerint ut quam contaminatissimos haberent codices; cum singulae nationes id imprimis operam dent ut libros ad sacra et rempublicam spectantes, singulari diligentia incorruptos servent' (Hornius, *Dissertatio*, sig. (*)3 $^{\rm v}$).

^{92 &#}x27;est divina pariter ac humana confundere' (Hornius, *Arca Noae*, 12–13).

time there are verses in Homer in which not one but three or four variant readings appear.

For Virgil he had even better evidence to draw on: that compiled by the Roman scholar Pierio Valeriano (1477–1558), who had issued the first formal critical apparatus ever to appear – the *Castigationes et varietates Virgilianae lectionis* – in 1521:

No one ever imagined in his dreams that incorrupt copies of Virgil survive. Collate the old manuscripts and you will scarcely find a half-line that does not show some variation. Pierio Valeriano collected the main readings from just a few manuscripts, and what a vast stock of readings is there!⁹³

A generation or two later, Richard Bentley (1662-1742) would draw the attention of contemporaries and posterity by insisting that textual criticism was in part a historical art - one that rested on histories of textual transmission, and that could not restore more than the earliest stage in that process. The textual critic could produce a Greek New Testament in the form in which it had been read before the Council of Nicaea - but not one as it had been read in centuries earlier than that. But Bentley, as Kristine Haugen has taught us, drew much of his method from the Dutch textual critics. 94 He admired the Italian manuscript specialists of the sixteenth century so warmly that he reprinted another variant-reading rich work compiled by one of them, Gabriele Faerno's commentary on Terence, in his own edition of the comedies. When Vossius discussed the New Testament, he adopted a brusque tone that adumbrated Bentley's insistence on the impossibility of reconstructing the original New Testament. Anyone who claimed that the Hebrew text was perfect, he told his readers, was asserting that God had shown special providence for the Jews: 'and none at all for those who copied the books of the New Testament.

⁹³ 'Quis enim ignorat iam Pisistrati aetate laborasse grammaticos et criticos in expurgandis mendis codicum Homeri? Quis nescit obelos et asteriscos Aristarchi, quis studium Zenodoti, Cratetis, Aristophanis, utriusque Apollonii, mille denique aliorum, qui florente etiamnum Graecia de varietate huius aut illius lectionis opera conscripsere immania? Hoc etiam nostro seculo supersunt versus in Homero, ubi non una, sed triplex imo etiam quadruplex occurrat lectio. Sed et Vergilii exemplaria incorrupta superesse, quis unquam somniavit? Si quis committat veteres membranas, vix ullum versiculum inveniet ubi non aliqua sit discrepantia. Praecipuas saltem lectiones collegit Pierius Valerianus e paucis duntaxat codicibus, et tamen quam vasta illic variarum lectionum copia?' (I. Vossius, *Castigationes*, sigs *3^{v_4}*). For early modern views on the state of the Homeric text in antiquity see Ferreri, *Questione omerica*; for Valeriano and Virgilian textual criticism see Gaisser, *Pierio Valeriano*, 14–15.

⁹⁴ Haugen, Richard Bentley.

They have so many variant readings that if someone compared all the manuscripts, he would find almost as many variants as words'. This strong formulation contrasts sharply with the better-known and ill-fated words that Daniel Heinsius (1580–1655) scribbled down one day in a fit of bad judgment as part of a preface to an Elzevier New Testament, and which would become the slogan of modern literalists: 'Here you have the text now received by all'. Ghallenged by Christian Schotanus, who dismissed his account of the textual situation of the New Testament as 'hyperbolic', Vossius drew on the time he had spent peering at the actual evidence:

Here he reveals great ignorance, and shows that he has never dirtied his hands with a manuscript \dots In the library of Francesco Cardinal Barberini I once saw a collection of the variants from ten or twelve manuscripts. This alone would suffice to save my credit. 97

One way to read Vossius, then - and not a wholly implausible one - is as a daring critic, empirical in his approach, who eminently deserved the respect he won from such acute judges as Henry Oldenburg (ca. 1618–1677) and the Fellows of the Royal Society.

Some Concluding Thoughts

A few conclusions emerge clearly from this long investigation. One is simple: for all the filiations that we can trace between Isaac Vossius' methods and those of others, in essence he remains an elusive being, a butterfly that no one can hope to pin to a single spot on the map of the Republic of Letters. His treatment of his central sources for chronology was arbitrary, even by the standards of the time. Vossius, as we have seen more than once, saw Chinese chronology as a central, reliable strand in world history. Even when he drew up what he described as a chrono-

⁹⁵ '… nullam autem curam habuisse eorum qui descripsere novi foederis libros, in quibus tanta est lectionum varietas ut si quis omnes inter se committeret codices, quot verba totidem pene sit inventurus discrepantias?' (Vossius, *De vera aetate mundi*, V).

⁹⁶ De Jonge, Daniel Heinsius and the Textus Receptus of the New Testament.

^{97 &#}x27;Hyperbolicum me vocat quia dixi si quis omnes excuteret scriptos Novi Testamenti codices, quot verba totidem pene fore discrepantias. Magnam hic prodit ignorantiam et ostendit se ne unum quidem manu exaratum librum trivisse... In bibliotheca Fr. Barberini cardinalis vidimus olim discrepantes lectiones ex decem vel duodecim exemplaribus collectas, quae vel solae fidem meam possint liberare' (Vossius, *De Septuaginta interpretibus*, 416).

logical table almost exclusively devoted to sacred history, he included the Chinese kings in it. 98 Yet he laid out a radically oversimplified vision of Chinese history and culture. Hornius used another Jesuit authority, Nicolas Trigault (1577–1628), to argue that extant Chinese books were not so old, or Chinese history so free of conflict, as Vossius thought. 99 More effectively still, he piled up quotations from Martini's *Novus atlas sinensis* that indicated that Martini himself saw much of Chinese tradition as unreliable. 100 Most cogently of all, he noted that it seemed unduly rash to redate the lives of biblical patriarchs and reconfigure ancient history on the basis of Chinese annals that Vossius knew only at second hand, and that Europeans could not read in the original in any event. 101

Vossius barely tried to counter these arguments, but instead simply continued to insist on that he had read Martini – and the ancient sources – correctly. The arbitrariness with which he picked a limited number of sources to rely on is reminiscent of a better-known contemporary – Athanasius Kircher (1602–1680). Kircher argued, in his *Oedipus Aegyptiacus* of 1652–1654, that the Egyptian kingdom had existed before the Flood. He too

⁹⁸ I. Vossius, De Septuaginta interpretibus, 185–240.

⁹⁹ 'Trigautius testatur: ab omni memoria civiles tumultus bellaque minime defuisse' (Hornius, Dissertatio, 53). For the antiquity of Chinese books see esp. Hornius, Defensio, 52–53.

<sup>52–53.

100 &#</sup>x27;Non diffitetur Martinius multa in historiis et geographia Sinensium fabulosa et ridicula occurrere; eaque *passim* ipse recenset et ridet. Inspiciantur vel haec tantum quae de Xinnungo primo imperatore Sinensium habet p. 41, de Hiaouo p. 47, de Caosino p. 81, et alia p. 63, 67, 71, 108, ac inde quantum fidei annales illi Serum antiquissimi mereantur, quisque secum perpendat. Nihil certius est vel ex paucissimis quae Martinius *passim* geographiae suae inseruit, quam annales Sinensium, praesertim in antiquissimis illis rebus, plenos fabularum et in nominibus regum et rebus gestis esse, adeoque non maiorem mereri fidem quam Saxonem grammaticum, Ioh. Magnum, et alios fabulosos scriptores. Inde facile colligitur quantam eorum antiquitatibus fidem adhibendam statuat' (Hornius, *Defensio*, 54).

^{101 &#}x27;Essent igitur ante excutiendae omnes Serum bibliothecae, et antiquissima inter se conferenda exemplaria, variae lectiones annotandae, synchronismi et anachronismi conferendi, quam certi quid de tanta regum per tot secula continuata serie ac successione statueretur, quam omni vitio carere impossibile est, cum id ne in recentioribus quidem regum historiis fieri possit. Cum vero nemo nostrum libros Sinensium intelligat neque uni in tam gravi causa fides adhiberi possit, hinc patet chronologiam Sinensium, tanquam nondum satis exploratam et in multis adhuc vel dubiam vel incognitam, non debere contra temporum rationem, quae in Hebraeis codd. traditur, et per tot secula obtinuit, allegari. Multominus deliria Praeadamitae tanti esse debent, ut cum sua vanitate corruant et explodantur, propterea 1440 anni ex corruptis quorundam lacunis, temporibus Mosaicis assuantur, praesertim cum tam paucis annis, tot myriades seculorum, quae Sinenses Cathaei, Iguri, Bramae ac omnes fere Indorum populi, ut nihil de Chaldaeis et Aegyptiis dicam, fingunt, haud quaquam expleri possunt' (Hornius, *Dissertatio*, 70).

relied on arbitrarily chosen texts.¹⁰² His theory about Egyptian chronology rested not on the dynasty lists of Manetho, an actual ancient Egyptian, but on a fifteenth-century Cairene historian, Imam Jalaluddin Al-Suyuti.¹⁰³ Yet it was Hornius, not Vossius, who argued, as Kircher had, that China was not an independent state with antediluvian roots but an Egyptian colony.¹⁰⁴ Vossius, for his part, brusquely dismissed Kircher, as a scholar given to arbitrary hypotheses, ingenious but lacking solid underpinnings:

That Kircher of yours was, to be sure, my friend at Rome once upon a time. But in philology he is exactly like you – except that he was both far more clever and far more learned. It is not surprising that you have such esteem for his *Oedipus*, which his friends wish he had not written.¹⁰⁵

It is hard to know what to make of such a description – one that seems, after all, as applicable to Vossius himself as to Kircher. Many agreed with Edward Pococke (1604–1691) that Vossius had won a reputation among the curious and unscholarly by making radical pronouncements 'all authoritative, without Good Proof or Reason'. ¹⁰⁶ And it is all the harder to interpret Vossius' arguments when one considers how inconsistent Vossius himself could be, especially when it came to judging others' views on philology and history. When he read Samuel Bochart's *Geographia sacra* of 1646, he confided to the book's author that he could not 'express what I feel, or feel what I should,' when reading his immensely erudite demonstration that the Phoenicians had carried Jewish traditions across the ancient world, giving rise to ancient myths and much more. ¹⁰⁷ He told Claude Sarrau (ca. 1600–1651) that

¹⁰² Kircher, Oedipus Aegyptiacus I, 65–112; see esp. 74 on the sources he chiefly relied on, which were Arabic texts: 'Et quamvis non ignorem haec omnia eo loco apud nostri temporis philologos futura quo omnia ἀπόκρυφα, nolui tamen ea omittere, cum quia historiae sunt Latinis incognitae, tum quia nescio quam veritatis scintillam, etiam sub huiusmodi barbararum relationum favillis latentem, comperi; ut proinde non omnia quae fabulas et commenta redoleant respuenda putem. Multa habent Arabes Latinis Graecisque incognita, quae si peritorum industria publici iuris fierent, nae brevi magnam reipublicae literariae, in multis huc usque inter authores controversis, accessionem futuram sperarem.'

¹⁰³ Grafton, 'Kircher's Chronology'.

¹⁰⁴ Hornius, Dissertatio, 54-55.

 $^{^{105}}$ 'Profecto iste tuus Kircherus, quamvis mihi olim Romae amicus, vir fuit in philologicis prorsus tui similis, nisi quod longe ingeniosior fuerit et eruditior. Non itaque mirum, tanti a te fieri Oedipum eius, quem tamen amici nollent ab illo scriptum' (I. Vossius, Castigationes, 41).

 $^{^{106}\,}$ Pococke to Marsh, February 1679–1680, quoted by Katz, 'Isaac Vossius and the English Biblical Critics', 166.

¹⁰⁷ Vossius to Bochart, s.d.: 'Tandem nobis quoque, vir summe, videre contigit opus tuum eximium de posteritate Noachi et coloniis Phoenicum, quo neque maius quidquam

I cannot tell you with how much profit and passion I am going through Bochart's book. He is the first to have written in a learned way about the descendants of Noah and the colonies of the Phoenicians, and, in my view, he will be the last. For if peoples everywhere were named after the descendants of Noah, and if the Phoenicians named all the lands and cities that they reached, either he has hit the nail on the head or no mortal will ever do it.¹⁰⁸

These apparent expressions of admiration had their sly ambiguities. Yet neither Bochart nor Sarrau would have expected Vossius to write as he did to Claude Saumaise:

I love Bochart from the bottom of my heart. He deserves it, given his integrity and the humanity he has shown me. Yet I can practically never accept his views. In fact, the more carefully I read his writings, the farther I am forced to depart from his views. Anyone who cares to study the origins of peoples in this way will be able to find Syrians and Phoenicians in the middle of Scythia. 109

At this point, the usual evasive tactics of scholarly life have metamorphosized into something very peculiar. Vossius did his best to resist classification, in his own time or now.

A second conclusion rests on even stronger evidence. From the first *Dissertatio* to the last polemical open letter, Vossius insisted on one point: the Hebrew text of the Old Testament did not deserve the esteem in which most Protestants held it. Again and again, Vossius made clear that

neque gratius unquam obvenire potuisset. Quandocunque illud ad nos pervenisset, nunquam adfuisset inexpectatum, cum ex eo tempore quo publici iuris fieri coeperit, omnibus votis expetitum semper fuerit. Ego certe nec tacere, nec dignum quid pro excellentia tanti operis dicere possim. Si tacuero, merito me et ingratissimum et indignissimum tantis tuis beneficiis censueris. At vero si quidquam dixero, nimium quantum id infra merita tam luculenti muneris futurum sit. Neque exprimere quae sentio, neque sentire possim quae debeam: cedunt enim verba sensibus, quantum sensus cedunt pretio laborum tuorum' (AUB, Ms. RK VI F. 28, pp. 101–102). On the theories of Bochart (1599–1667) see Gruppe, *Geschichte*, 50; Allen, *Mysteriously Meant*, 69–71.

¹⁰⁸ Vossius to Sarrau, s.d.: 'Ante duas circiter hebdomadas accepimus librum τοῦ πάνυ Bocharti. Non possum dicere quanto illum fructu et desiderio pervolvam. Primus ille est qui de posteritate Noachi et coloniis Phoenicum erudite scripserit, et, ut puto, erit ultimus. Nam si a Noachidis *passim* gentes sunt appellatae, et si Phoenices omnibus quas adiere terris et urbibus nomina dederint, aut ille rem acu tetigit, aut nemo id mortalium sit facturus' (AUB, Ms. RK VI F. 28, p. 104).

¹⁰⁹ Vossius to Saumaise, s.d.: 'Amo ego ex animo Bouchartum: ita meretur viri illius doctissimi candor et erga me humanitas. Nec tamen possum eius opiniones usquam ferme approbare, imo quanto diligentius eius scripta pervolvo, tanto longius cogor ab eius sententia recedere. Siquis hoc modo velit gentium origines scrutari, aeque in media Scythia Syros et Phoenices inveniet, atque ille noster Lugdunensis, Scythas et Germanos ubique terrarum reperit' (AUB, Ms. RK VI F. 28, p. 98).

in arguing this point, he was choosing one set of Jewish witnesses against another: basically, the Hellenistic Jews who had produced the Septuagint, Josephus, and Philo, against the medieval and modern Jews who had created the Masoretic or standard Hebrew text. In fact, Vossius rejected the entire Jewish scholarly tradition, as preserved and carried on by the rabbis. Christian scholars might begin by trusting the Jews: but soon enough they learned that 'the books of the Rabbis contain no true interpretations at all, and they are as ignorant of the Hebrew language as of other matters'. ¹¹⁰ As to chronology, Jewish scholars had nothing to offer. God's curse had deprived them of all knowledge in that realm, as in so many others: 'We would be very credulous if we tried to learn about chronology and the meaning of the Scriptures from those whom God deprived, so many centuries ago, of understanding and knowledge'. ¹¹¹ Jewish chronologies were full of 'monstrous errors': they held that Plato had met Jeremiah in Egypt and that the kingdom of Persia had lasted only 52 years. ¹¹²

These judgments were extreme, even fanciful. Vossius listed not only the Protestant lexicographer Johannes Forster (1498–1556), who genuinely denounced Jewish learning, but also Giovanni Pico della Mirandola (1463–1498) and Johannes Reuchlin (1455–1522) among those Christians who supposedly abandoned their faith in Hebrew learning, and in his denunciation of Jewish chronology he failed to take account of the great work of Azariah de' Rossi (1513/14–1578), *The Light of My Eyes*, which had

¹¹⁰ 'Quid attinet memorare complures nostri et superioris seculi homines futili hac persuasione a Iudaeis deceptos, quos tamen postmodum, detectis istorum offuciis, credulitatis suae puduerit? Testes sint Picus Mirandulanus, Reuchlinus et praecipue huius discipulus Iohannes Forsterus, cuius, siquis quam Hebraico quod Basileae prodiit lexico perlegat praefationem, protinus cognoscet, quam ille magnifice de Iudaeis primo senserit, quantumque postea poenituerit, ubi comperit, nullam lucem nullamque omnino veram expositionem in Rabbinorum occurrere libris, illosque ut ceterarum rerum, ita linguae quoque Hebraicae penitus esse ignaros' (I. Vossius, *Responsio*, 55–56). The lexicon cited by Vossius is Forster, *Dictionarium hebraicum novum*.

^{&#}x27;lli 'Nimis profecto creduli simus si chronologiam et intellectum Sacrae historiae ab illis accipere velimus, a quibus Deus intellectum et scientiam iam a tot seculis abstulit' (I. Vossius, *De Septuaginta interpretibus*, sig. c^v).

^{112 &#}x27;Apud omnes vel leviter literis tinctos in confesso est, nullos homines in chronologia et historia aeque esse absurdos ac sint hodierni et antecedentium seculorum Iudaei. Nihil tam monstrosum est quod illorum chronica non contineant. Samuelem tredecim tantum aiunt annos regnasse, Platonem in Aegypto conversatum fuisse cum Ieremia Propheta, regnum Persarum a Cyro ad mortem Alexandri non diutius quinquaginta duobus stetisse annis, multaque alia magis etiamnum monstrosa. Et tamen caeci isti Christianos oculatos qua volunt ducunt, eaque etiam persuadent, quae ne ipsimet quidem credant' (I. Vossius, De Septuaginta interpretibus, sigs c^v–c2^r).

anticipated his own efforts to use the works of Hellenistic Jews. 113 But they are especially striking in the context of Vossius' own family history. For he belonged to a family of Hebraists. His brother Dionysius (1612–1642), though he died young, managed to translate the treatise on idolatry from Maimonides' Mishneh Torah into Latin and equip it with a detailed commentary.¹¹⁴ Gerardus Joannes Vossius, though less fluent in Hebrew than his son, made detailed collections of bibliographical and biographical information towards a history of rabbinical literature that he did not complete. On the evidence of the surviving drafts, it would have resembled his sober, erudite published works on the Greek and Latin historians. 115 Isaac, by contrast, denounced contemporary Christians' interest in Jewish scholarship as a wrong-headed enterprise, which threatened to expel the Fathers of the Church in order 'to transform theology into Rabbinology'. 116 If Vossius' larger intellectual location has evaded detection, one of the motivations for his interest in chronology and even for his choice of a method seems clear: he was rebelling against the very family that had taught him how to practice scholarship.

Perhaps the most striking feature of Vossius' chronology, in the end, is the growing radicalism with which he treated all existing traditions. Hornius and other critics saw the *Dissertatio de vera aetate mundi* of 1659 as shocking because Vossius elevated the Septuagint over the Hebrew, the translation over the original – and argued that Josephus, though a Jew, had

¹¹³ See De' Rossi, Light of the Eyes, and cf. Weinberg, 'Quest for Philo'.

¹¹⁴ See the lucid and learned study by Katchen, Christian Hebraists and Dutch Rabbis.

¹¹⁵ AUB, Ms. RK III D. 12 (a) ('De temporibus Rabbinorum', starting with the Great Synagogue) and (b), bibliographical notes coming down to the Renaissance Jewish scholar Elijah Levita. One sample of the latter will give a sense of his strengths and weaknesses (he reads the Jewish sources, including medieval ones, at first hand, but thinks that a work on medieval Ashkenez might be by a Spanish rabbi): 'Idemne, an alius [sc. R. Samuel filius R. Iehudae Aben Tybbon], R. Samuel, qui circa annum CI)CLXXX scripsit librum כסידים [sic] chasidim h.e. sanctorum sive piorum: quo in libro habentur pie sancteque vivendi et praecepta et exempla. Operi praefixum videas nomen filii "הודה חסיד R. Iehudae pii. Cum antea excusus foret Venetiis, ex codice m[anu]s[script]o auctior a Frobenio editus est an[no] CI)I)LXXXI.'

¹¹⁶ Cum et in scriptis et in sermone fateantur periisse linguam Hebraeam, nesciri phrasin, vocalium usum ac veram vocabulorum significationem, facile tamen vel sola adfirmatione Christianos inducunt, ut credant nullum esse huius seculi quamtumvis famelicum Rabbinum, qui non maiorem linguae Hebraicae adsecutus sit cognitionem, quam omnes simul septuaginta habuere interpretes, sine quibus tamen ne tria quidem quae intelligerentur verba superessent. Nescio utrum magis mirer simplicitatem eorum qui tam misere decipi se patiuntur, an vero illorum calliditatem qui merces suas tam care distrahunt et incautis emptoribus somnia pro oraculis divendunt. Id sane adsecuti sunt hac nostra aetate, ut explosis patribus et omnibus Christianae ecclesiae doctoribus, tota fere theologia in Rabbinologiam sit conversa' (Vossius, *De Septuaginta interpretibus*, sig. c2^r).

deliberately chosen to follow the Septuagint chronology. By 1661, however, as the arguments grew both sharper and more ramified, Vossius advanced a far more radical thesis. Scripture survived and retained its identity: but many parts of its fabric had been changed or repaired, like those of an ancient building – distinguishing the ages and origins of which was, of course, a specialty of seventeenth-century antiquarians:

If over the course of time and because of the carelessness of scribes, considerable changes have taken place in words and letters and accents, nonetheless this does not mean that it is not the same Sacred Scripture that it was in the past. We would be foolish to deny that the Pantheon which stands at Rome today is the one that Agrippa formerly built.¹¹⁷

These patched and faulty texts still served the principal function for which they had been created: 'There is no manuscript so full of errors that it should not be taken as Scripture. From any of the manuscripts of the sacred books we may draw, in abundance, all the things necessary for salvation and faith'.¹¹⁸

What the Bible could not do, however, was to provide an armature for chronology. Vossius argued, in fact, that the Bible, like other Oriental texts, offered only the history of the periods during which the Jews had ruled themselves. It included dates for only a few of the many periods of anarchy and captivity in which the Jewish state had not existed. What looked from a distance like a solid structure, perfect and coherent, was actually a Swiss cheese, pocked with lacunae. The text did not even specify the size of these. Yet only a scholar who took all of these politically vacant

^{117 &#}x27;Quod si lapsu temporum et incuria librariorum in verbis et literis et apicibus non exigua facta sit mutatio, non hoc obstat quominus sacra Scriptura eadem sit quae olim. Stulti simus, si quod Romae extat Pantheum, negemus esse illud ipsum quod olim exstruxit M. Agrippa, vel denique si hunc quem incolimus mundum, quia magnae in eo factae sunt mutationes, alium esse dicamus ab eo quem in principio construxit Deus' (I. Vossius, *De Septuaginta interpretibus*, 30).

¹¹⁸ Frustra itaque sunt cum dicunt, quia nullum exemplar sit omnino purum, ergo nusquam esse sacram Scripturam. Imo vero nullum tam mendosum est exemplar quod non pro sacra Scriptura debeat haberi. Abunde et copiose e quibusvis Sacrorum librorum codicibus omnia ad salutem et fidem necessaria possunt hauriri' (Ibid., 29).

^{119 &#}x27;Illud quidem verum est, pleraque spatia quae in Sacris libris designantur, pro certis et definitis esse habenda, sed cum non pauci hiatus, cum alibi, tum praecipue in Iudicum historia occurrant, temerarium utique esse sentio, de iis quae reticuere Sacri scriptores, certi aliquid velle pronuntiare. Si tamen aliquid adfirmare velimus, tutius utique fuerit illis quos memoravimus credere scriptoribus, qui et viciniores fuere propheticis temporibus et accuratam rerum suarum habuere cognitionem, quam hodiernis Iudaeis, qui praeterquam quod iis careant subsidiis quibus Iosephus aliique antiqui Iudaei fuere instructi, etiam

periods into account, drawing information from Josephus as well as the Bible, could possibly recreate the whole chronology of the period before the Incarnation – a period that, Vossius now argued, had actually lasted for some six thousand years. 120 Like Walton, Vossius insisted that Josephus deserved special credence because he had used 'the monuments and manuscripts of the Temple, which still stood'. 121 Far more sharply than Walton, however, he exalted Josephus over the Old Testament in any of its forms: 'It is impossible to derive an accurate knowledge of chronology from the Scriptures alone, since all of the intervals are not recorded in them'. 122 In the end, what any single text said was not and could not be decisive. Chronology rested on the scholar's decisions about what the texts actually meant: 'From what I have said, I believe, it can clearly be seen how wrong they are who believe that a coherent and complete chronology can be derived from the Scriptures alone, without applying any interpretation.'123 As Vossius worked on the texts, one by one, he articulated positions that strangely and strikingly adumbrate features of Spinoza's arguments in the Tractatus.

In later years, Vossius continued to occupy and defend these same positions. Drafting a reply to one of his critics around 1670, he insisted that

in crasissima versantur ignorantia, et non exoticarum tantum, sed et propriarum antiquitatum sunt imperitissimi.

Ut itaque finiam, sic concludo, libros Sacros non continere universi temporis iam inde a creatione elapsi descriptionem, sed tantum narrationem temporis historici, eaque saltem in iis recenseri intervalla quibus respublica aut regnum Iudaicum stetit, omissis ut plurimum anarchiis, captivitatibus, aliisque infaustis spatiis, quae neque exemplo prosint et quibus quid factum sit penitus ignoratur' (Ibid., 173).

Omnium vero vitiosissimus hodiernus est calculus, in quo non anarchiae tantum sed et captivitates negliguntur. Et hoc quidem pacto tempus omnia absumens, et ipsum quoque si non omnino in nihilum redactum, magna tamen sui parte multatum et decurtatum fuit. In spatio quippe quod a rerum exordio usque ad Christi natalem effluxit, tertia pars deficit, cum enim sex annorum millia exspirarint antequam Christus in mundum venerit, vulgo tamen a Christianis non nisi quatuor annorum millia huic intervallo tribuuntur' (Ibid., 238).

^{121 &#}x27;Cum scriptor hic stantis etiamnum templi monumentis ac codicibus usus sit, longeque omnium Iudaeorum ab apostolicis temporibus usque ad nostra secula fuerit doctissimus, operae pretium fuerit idem quod olim repetere argumentum ac confirmare id quod olim adstruximus, Iosephum in annis ante Diluvium elapsis convenire cum LXX interpretibus, in annis vero post Diluvium aliquanto etiam productiorem secutum esse calculum' (Ibid., 104).

¹²² 'Ex solis quidem Sacris literis accurata temporum cognitio hauriri vix potest, cum in iis non omnia intervalla annotentur' (Ibid., 104).

¹²³ 'Ex supradictis, nisi fallor, clare deprehendi potest, quantum a veritate recesserint illi qui integram et absolutam temporum doctrinam e solis Sacris literis, nullo adhibito interpretamento, hauriri posse existimarunt' (Ibid., 172–173).

about the periods of anarchy and interregna I have said nothing that cannot be clearly inferred from Scripture, that does not fit the customs of the nations, especially the Eastern ones, and that does not show the certain way to resolve many of the difficulties that have up to now bedeviled the chronology of Scripture. 124

The scholar, not the Word, was still the master. In 1685, Vossius published a long, Utopian account of the arts and sciences in China. Like so much else by Vossius, this fascinating document is at once erudite and idiosyncratic. Vossius argued at length that the Chinese are superior to the West in every respect, from their understanding of the pulse and the circulation of the blood to their music and dance to their mastery of printing, the compass, and gunpowder – the three canonical arts normally cited by those who, like Jean Bodin (1530–1596) and Francis Bacon (1561–1626), believed that the modern European world had made important discoveries and inventions unknown to the ancients. What made the high standard of Chinese culture possible, he explained, was the longevity of Chinese society and, in particular, of the Chinese language. He then used this point to argue against the Modern side in the *Ouerelle* of the Ancients and Moderns. If the precondition of high culture was a long-lived universal language, Vossius explained, then those who insisted on using the modern vernaculars were clearly wrong, and the Ancients, who insisted that Europeans owed all their knowledge to their own durable, universal language of Latin, were right. Finally, and in passing, he made a striking statement about chronology. The Chinese, Vossius noted, alone in all the world, had preserved their literary language 'for around five thousand years'. 125 In his pamphlet on the true age of the world, Isaac had given the

Vossius to N.N., ca. 1670: 'De anarchiis et interregnis nihil dixi quod non manifeste e sacris possit hauriri literis, quod gentium praecipue orientalium moribus non conveniat, quod denique certam non ostendat viam qua componi possint pleraeque difficultates quae hactenus sacrorum librorum turbant chronologiam. Sic quoque complures e veteribus sensisse satis clare ex Aphricano colligi potest. Esto ut facilius haec dicantur quam probentur, sed an qui simpliciter negant aliquid probant? Quod vero addit, nos vivere in seculo minime credulo, nec facile admitti alia argumenta nisi quae penitus convincant: ipsum id facit ut credam, non defore qui inutilem existiment laborem eorum qui ea quaerant in sacris libris quae in illis non continentur quique vulgarem praecedentium aliquot seculorum chronologiam, quae nusquam sibi constat, nostrae posthabeant quae certis stat documentis, quae consentit cum annis gentium, quam et antiqui ludei et antiquissimi Christianorum secutae sunt ecclesiae, et ita quidem ut noster calculus ne uno quidem anno discrepet a calculo Antiocheno' (AUB, Ms. RK VI F. 29, p. 78).

¹²⁵ 'Soli in hoc nostro mundo sunt Seres, qui iam a quinque fere annorum millibus perennem et nunquam interruptam conservavere litteraturam, illam quidem operosam, sed cuius fructus tanto respondeat labori . . . Sola haec suffecit ratio, ut quaecumque artes

duration of Chinese history as around 4,500 years – roughly the period between the Flood, according to the chronology of the Septuagint, and his own time. Here he extended Chinese history 500 years, and by doing so repeated the scandalous, effectively Preadamite argument of his later polemical pamphlets. For Vossius, the world was older than any version of the Old Testament indicated. These positions – and his other ones – he seems to have reached from inside the scholarly tradition – or at least from an original position inside it.

This analysis suggests that Joseph Levine and Eric Jorink were right to argue that the philological method of the humanists was inherently radical: that it tended, over time, to diminish the authority of all texts, even those generally deemed to be sacred – and that to that extent, Vossius' work on chronology and the biblical text marked an important part of the context for Spinoza's even more radical attack on Scriptural authority. 126 It also suggests a way of understanding the early part of Vossius' career – the years before he became a member of speculative circles in England and enjoyed a reputation of his own for free thinking.¹²⁷ Suppose that he genuinely set out, as he claimed, to rescue the Bible from two opposed Procrustean enemies, Preadamites on the one hand and Rabbis on the other, the one group trying to stretch the text out and the other to cut it down. Perhaps as he wrote, and then as he defended what he wrote, he found himself attacking the Hebrew text and supporting the Chinese chronology more sharply, more radically, with fewer concessions than he had expected. Perhaps he found himself, as the logic of his arguments and the edge of his language pushed matters, taking more and more radical positions.

Yet it was not only Vossius' theories which helped to bring about the general radicalization of thought about history that characterizes the later seventeenth century. His publishing strategies also had their impact. Vossius helped, as La Peyrère had, to transform chronology from an esoteric, demanding pursuit for the erudite into a subject for argument in much wider social and cultural circles. He made his own main interventions into chronology not with massive treatises like those that Scaliger

et scientiae ad longe altius apud illos quam ullas alias gentes provectae fuerint fastigium' (Vossius, *Variarum observationum liber*, 69–70).

¹²⁶ Levine, *Autonomy of History*; Jorink, *Reading the Book of Nature*. For a distinguished and erudite exposition of a radically different point of view, see Israel, *Radical Enlightenment*, and Israel, *Enlightenment Contested*.

¹²⁷ On this later period in Vossius' life see Katz, 'Isaac Vossius and the English Biblical Critics,' emphasizing his relations with Charles Saint-Évremond.

and Petau, and for that matter his father, had written, but with pamphlets, the first of which was even translated into Dutch. In the early 1660s, living in Paris, he managed to see, and then to publish, the *Secunda Scaligerana* – the table talk from Scaliger's Leiden years, in which the great chronologer boldly professed that he was 'writing the history of 8,000 years, according to the pagans,' and lamented that he did not dare publish his discoveries about the mistakes in the Old and New Testaments. Vossius had little sympathy for Scaliger's particular views on Egyptian history and Jewish learning. But in printing these dramatic statements, as in putting forward his own theories, Vossius brought what had been the safe debates of the learned, imprisoned in expensive and rebarbative folios, down onto the street – where, as Pococke warned Marsh about Vossius' theory about the Sibylline Oracles, 'I hear, that by some at Coffee-Meetings, it is cried up'. 129

In the end, then, Vossius' chronology emerges as an extremely complex, dialectical combination of family tradition and anti-family rebellion, reconfiguring of existing methods and deliberate innovation. His work lacked depth, consistency, and rigor. But it had a certain power, a charge generated by Vossius' consistent radicalism, his willingness to push his theories to, and beyond, the limits of the evidence. And it helped to create what would become, in the hands of Newton and others, a period style, at once far more speculative and far more accessible than that of Scaliger, in chronological scholarship.

¹²⁸ On the textual history of the *Scaligerana* see Bernays, *Scaliger*, and Delatour, 'Pour une édition critique des Scaligerana'; and, for the larger context, Hasse, *Einführung in die Literatur des Refuge*, and Wild, *Naissance du genre des ana*.

¹²⁹ Pococke to Marsh, February 1679–1680, quoted by Katz, 'Vossius and the English Biblical Critics,' 166. Cf. more generally Sutcliffe, *Judaism and Enlightenment*.

ISAAC VOSSIUS AND THE SEPTUAGINT

Scott Mandelbrote*

The Background to a Quarrel

When Isaac Vossius (1618–1689) settled in England in 1670, the principal factors that motivated him were annoyance at the decision by the States of Holland to cease paying his salary as their historian, and the prospect of collaboration with John Pearson (1613–1686), Master of Trinity College, Cambridge, on a new edition of the Ignatian epistles. This work would vindicate their antiquity and authenticity, in turn buttressing claims about the role of episcopacy in the primitive Church, and build on Vossius' own earlier endeavours as an editor.¹ Despite recent vicissitudes, Vossius was one of the most famous and well-connected scholars in Europe.² His pedigree descended from his father, Gerardus Johannes Vossius (1577–1649), whose scholarship and religious moderation had won him many friends in England, where he had for a time resided.³ The younger Vossius had forged a stellar path as a scholar of extraordinary promise, in part as a result of manuscript discoveries that he had made in Italy and that soon brought him into contact with leading English theologians, particularly in the circle

^{*} I am grateful to Dirk van Miert and Eric Jorink for the invitation to participate in this volume and for their work as editors. Astrid Balsem kindly gave advice about Vossius' books and manuscripts. Nicolette Mout's knowledge and hospitality made working in the Netherlands a pleasure. Jean-Louis Quantin eased my path to the Archivio della Congregazione per la Dottrina della Fede, where I thank Monsignor Alejandro Cifres for granting me the necessary permission for my work. Tabitta van Nouhuys read and criticised drafts with her usual skill. The Leverhulme Trust generously funded much of the research on which this essay is based. Without the help of the late Bruno Neveu, I would not have gained access to the Archives de l'Oratoire in Paris: this was one of the many acts of kindness for which I remember him fondly.

¹ See Seccombe and Blok, 'Isaac Vossius'; AUB, Ms. RK VI F. 29, pp. 59, 64–65; Pearson, *Vindiciae*: Vossius' own letters on the subject are published at sigs 4A1'–4E3'.

² For Vossius' early life, see particularly Blok, *Isaac Vossius and his Circle*; for his later career, see Katz, 'Isaac Vossius and the English Biblical Critics'.

³ See Rademaker, *Vossius*, esp. 223–235; AUB, Mss J. 88–89 (correspondence of Isaac Vossius with his parents, 1641–43); Blok and Rademaker, 'Isaac Vossius' Grand Tour, 1641–1644'.

of James Ussher (1581–1656), Archbishop of Armagh.⁴ His later career had established him as disciple, friend, or competitor (and sometimes all three at once) of a succession of classicists, historians, and *érudits* whose reputations shone in the firmament of European, Protestant scholarship: for example, Claude Saumaise (1588–1653), Samuel Bochart (1599–1667), and Nicolaas Heinsius (1620–1681).⁵ He was famed as a collector as well as a discoverer of manuscripts, and his library of printed books, in part inherited from his father, had already generated one major sale.⁶ Manuscripts that he owned had led to important editions, in which leading English scholars of an older generation, as well as younger French scholars had played a role.⁷ His contacts and publications extended beyond the world of humanist letters, into fields of geographical and scientific discovery in which patronage might have proved an even more lucrative prize. During the 1660s, he was in contact not only with the Royal Society of London, but also with the extensive information-gathering network of the French statesman, Jean-Baptiste Colbert (1619–1683).8 Although no stranger to controversy or even shady dealing, Vossius in 1670 remained a prince in the Republic of Letters.

Other scholarly projects, however, were also of interest to prospective patrons in England, and had already been canvassed extensively by Vossius

⁴ See AUB, Mss J. 90–91; AUB, Ms. E. 121 (James Ussher to Isaac Vossius, 18 February 1648); Rademaker, 'Ussher and the Vossius Family'; Quantin, 'L'Orthodoxie, la censure et la gloire'.

 $^{^{5}}$ See Ter Horst, *Isaac Vossius en Salmasius*; Blok, *Isaac Vossius en zijn kring*; for relevant correspondence, see esp. AUB, Mss RK III E. 8–9.

⁶ Blok, *Contributions*, which must be modified by the discoveries of further sales made by Balsem, 'Books from Dudith'. See also Balsem, "*Libri omissi*" and Callmer, ed., *Catalogus codicum*

⁷ Above all, a manuscript of the Greek text of Origen's commentary on the Gospel of Matthew, now Cambridge, Trinity College, Ms. B.8.10; this also includes another text, *De Oratione*, attributed to Origen. See also Ms. B.9.10 for transcripts from codices in the Biblothèque Royale, Paris, obtained by the English scholar, Herbert Thorndike, from Vossius, to whom they were given by Claude Sarrau (on which, see AUB, Ms. RK III E. 8, nos 150–151). Thorndike had been aware of the manuscript of Origen on Matthew since 1659, when he began a correspondence with Vossius about biblical criticism and its sources. See AUB, Mss RK III E. 9, nos 234–235; RK III E. 10, nos 233, 250, 333–334. The manuscript was edited by Pierre-Daniel Huet in 1668 (see bibliography). See also Mathieu, 'Huet et Origène'. For Huet's copying of the manuscript, see PBnF, Ms. Fonds français 3930, pp. 29–30 (Huet to Saumaise, 17 August 1652); Ms. Supplément Grec 434. Cf. LUB, Ms. BPL. 885, no. 4 (Isaac Vossius to Huet, 4 May 1660), which describes Vossius' acquisition of the manuscript.

⁸ See letters from Jean Chapelain and from Colbert (AUB, Ms. RK III E. 10, esp. nos 48, 50, 52, 55, 128–129); cf. the drafts of letters from Vossius to Colbert (Ms. D. 76) and the material exchanged with Melchisédech Thevenot (Ms. D. 85); cf. Soll, *The Information Master*, esp. 94–152. See also the contribution by Eric Jorink, below, 121.

himself. Among these were undertakings for which Vossius' apparently unique combination of knowledge of the contents of libraries throughout Europe with skill both as an editor of Greek texts and as a natural philosopher and chronologist made him a natural choice. Foremost among these was the production of a new, critical edition of the surviving text of the Hellenistic Greek translation of the Old Testament. This translation was known as the Septuagint as a consequence of the legend, told in the pseudonymous *Letter of Aristeas* and augmented from Philo, Justin Martyr and other sources, of its composition by seventy-two inspired translators, supposedly working to help stock the library of Alexandria for Ptolemy II Philadelphus (285–247 BC). Vossius was neither modest in his ambitions, nor reticent in broadcasting them. In 1665, he told Paul Colomiès (1638–1692), a young French Protestant scholar whom he had befriended and brought to the Netherlands, that:

we should expect from him a Catullus, an edition of the Septuagint, a Ptolemy, the grammar of Dionysius Thrax..., a Callimachus, the voyage of Hanno the Carthaginian, [the letter of] Aristeas, a history of plants, an Aristophanes, an Aratus, a dissertation on the letters and pronunciation of the Greek language, the catalogue of the kings of Egypt, the second edition of the geographer whom he printed when he was very young under the name of *Scylax*, a Martial, and some works of mathematics.¹⁰

Others already doubted Vossius' ability to produce what he promised. Jean Chapelain (1595–1674), one of Colbert's agents, urged him to give priority to his abortive work on Dutch history, even though he conceded that 'the new edition of the Septuagint version about which you told me will be of very great consequence, particularly if it is backed up by... your observations and reconstructions [of the text]'. But to English clerics of the 1670s, the Septuagint was at least as important as the Ignatian epistles.

 $^{^9}$ See, in general, Wasserstein and Wasserstein, Legend of the Septuagint; Léonas, L'Aube des traducteurs.

¹⁰ Colomiès, *Opuscula*, 141–142: 'Si M. Vossius nous tient sa parole, nous devons attendre de luy un Catulle, une Bible des Septante, un Ptolomée, la Grammaire de Denis de Thrace..., un Callimaque, le Voyage de Hanno Carthaginois, Aristée, une Histoire des Plantes, un Aristophane, un Aratus, une Dissertation sur les Lettres & sur la prononciation de la langue Grecque, le Catalogue des Rois d'Egypte, la seconde Edition du Geographe qu'il fit imprimer fort jeune sous le nom de *Scylax*, un Martial, & quelques Ouvrages de Mathematiques.' Of these, only the Catullus and the work on the Greek language could really be said to have appeared during Vossius' own lifetime.

¹¹ Chapelain to Vossius, probably 1668: 'La nouvelle Edition que vous me dites de *la Version des Septante* sera d'une fort grande consequence sur tout si elle est appuyée... de vos observations et restitutions...' (AUB, Ms. RK III E. 10, no. 154).

England and Codex Alexandrinus

English concern for an edition of the Septuagint in the early 1670s had two principal causes, beyond the theological and perhaps polemical desirability of such a thing for its own sake. The first was the result of a failure and the second was intended to contribute to a success. The failure was the collapse of earlier efforts to edit Codex Alexandrinus, a very early manuscript of the Septuagint and the jewel of the Royal Library. This had been given to Charles I by Cyril Lucaris, Patriarch of Constantinople, in 1627, but attempts to edit it during the 1640s and 1650s had foundered, to general embarrassment. The hoped-for success was the plan by John Fell (1625–1686), then Dean of Christ Church, to create a learned press for Oxford University. Fell's original prospectus for the press in January 1672 stated that:

We purpose to Print, if we may be encouraged: 1. The greek Bible in a royal folio, to w[hi]ch purpose we have procured the use of the Alexandrian Ms. out of his Ma[jes]ties: library, with others of good note from diuerse Places & have of our own seueral copies of venerable Antiquity nevre yet collated. 14

There can be little doubt Fell both needed and wanted Vossius' assistance with what was to be the most important undertaking of his new press. The recent publication, by Pierre-Daniel Huet (1630–1721), of readings from Vossius' manuscript of Origen by itself would have led Fell to seek him out. On 12 March 1670, Fell wrote to Vossius asking help with his planned edition of the Bible, which he said would be 'spotless and accurate, as faithful to the Alexandrian copy as can be'. 15

From the other side, Vossius' own curiosity about Codex Alexandrinus was both longstanding and clear. Throughout the summer of 1659, Vossius' uncle, Franciscus Junius the Younger (1591–1677), who was then visiting London, sought information about the manuscript, especially from John Dury (1596–1680), at the time deputy keeper of the former Royal Library. Junius persuaded Dury to approach his superior, Bulstrode Whitelocke (1605–1675), who had been ambassador to the court of Sweden in 1653–1654, when Vossius was serving as Queen Christina's

¹² Now LBL, Mss Royal I D. v–viii. See also McKendrick, 'The Codex Alexandrinus'; Spinka, 'Acquisition of the Codex Alexandrinus by England'.

¹³ See Johnson and Gibson, *Print and Privilege*; Morison, *John Fell*; Keene, 'John Fell'.

¹⁴ Oxford, All Souls College, Ms. 239a, fol. 1^r.

^{15 &#}x27;splendidam iuxta et accuratam, ad Alexandrini exemplaris potissimam fidem...' (AUB, Ms. RK III E. 10, no. 132).

librarian. Whitelocke was asked unsuccessfully to arrange to send Codex Alexandrinus to Holland. When this plan failed, Vossius' great friend Thomas Browne (1604–1673), canon of Windsor and formally chaplain to the Stuart court in The Hague, described the manuscript for him in some detail, shortly after his own return to London in 1660.17 One of the editors of the London Polyglot Bible (1653-1657), in which collations from Codex Alexandrinus had appeared, was Herbert Thorndike (1597–1672), who was also one of Vossius' closest English contacts. Vossius eventually gave Thorndike his manuscript of Origen's commentary of the Gospel of Matthew. 18 Thorndike was collaborating with Thomas Gale (1635/6–1702), Fellow of Trinity College, Cambridge, and later Regius Professor of Greek, in his own work on the writings of Origen.¹⁹ At the same time, Gale was involved with the plans of the Oxford press to edit Codex Alexandrinus, eventually publishing an edition of the psalter based on the manuscript.²⁰ It is tempting to think that Vossius may have been playing off the respective hopes of Oxford and Cambridge: encouraging Fell to count on his aid, on the one hand; on the other, actively supporting Pearson (not least in his edition of Ignatius) and donating manuscripts to Thorndike.

Nevertheless, Vossius was actively engaged in work on the Septuagint text. This interest persisted, as can be demonstrated by his later acquisition of a copy of a manuscript with collations of the Greek and Hebrew texts of the Psalter, which is in the hand of Patrick Young (1584–1652), the former Royal librarian who had first attempted to edit Codex Alexandrinus. This was one of several manuscripts that Vossius bought at the sale in 1684 of the books of John Owen (1616–1683), formerly Dean of Christ Church during the Interregnum and a critic of Walton's Polyglot, who had acquired many of Young's books after the librarian's death. Right

¹⁶ See Van Romburgh, ed., *'For My Worthy Freind'*, 898–917, esp. 898–905 (Junius to Vossius, 24 June 1659).

¹⁷ AUB, Ms. RK III E. 10, no. 259 (Browne to Isaac Vossius, 3 December 1660); cf. Vossius' discussion of the manuscript with Étienne Le Moyne in 1662, Ms. RK III E. 10, no. 310.

¹⁸ See n. 7 above. On Thorndike, see Quantin, *The Church of England*, 352–366; Miller, 'The Doctrine of the Church'.

¹⁹ See Cambridge, Trinity College, Ms. B.7.4.

²⁰ [Gale, ed.], Psalterium.

 $^{^{21}}$ See esp. LUB, Mss Vossiani Misc. (Fol.) 20 and (Oct.) 39 (part of which (fols 1–16) had been compiled for Pearson).

²² LUB, Ms. Vossiani Misc. (Fol.) 4; cf. Millington, Bibliotheca Oweniana. On Young and the fate of his books, see Kemke, ed., Patricius Junius, esp. xxvii; Meyïer, Codices Vossiani Graeci, xi. Gale may also have been a buyer at the sale, see Cambridge, Trinity College, Mss O.1.10; O.4.41 (both of which belonged to Young). At least one of his manuscripts, which had descended from Sir Robert Cotton to Young (Cambridge, Trinity College, Ms. O.4.24),

up until Vossius' death, English scholars hoped that he might finally complete Young's work and produce or contribute to a definitive edition of the Septuagint, based on Codex Alexandrinus.²³

Preoccupation with Vossius' work on the Septuagint, therefore, came from several sides, and was encouraged by the sense that Vossius put about that he was going to produce a brand new Bible, with all the implications that such a project might have. As we shall see, however, the relatively benign setting for such intellectual activity in the 1670s was transformed in the last decade of Vossius' life, in a manner that would have terminal consequences, also, for his reputation. But before turning to consider this, it may be worth explaining why it was that people took Vossius' claims about his interest in the Septuagint so seriously. In order to do so, it is necessary to consider events that took place long before Vossius came to England.

Vossius' Earlier Preoccupations with the Septuagint

Vossius was always opportunistic in the manner in which he used learning and the resources that learning had put in his way. It seems that his encounter with the Septuagint may well have begun in this fashion. During the mid-1650s, the legacy of the greatest of Leiden scholars, Joseph Scaliger (1540–1609), who had doubted the authenticity of the traditional account of the composition of the Septuagint and the accuracy of its chronologies of the Old Testament, was still a matter of considerable debate. ²⁴ The issue was complicated by the discovery of new manuscripts of apparently ancient provenance, above all Codex Alexandrinus. It was made particularly topical at Leiden by the frenzied reaction throughout the Lutheran and orthodox Reformed Protestant world to the publication of

was however acquired earlier, since it bears a note on its flyleaf by Edward Bernard, who borrowed it from Gale on 5 April 1677; see also McKitterick, 'Books and Other Collections', 63. For evidence of Vossius' unsuccessful attempts in 1659 to acquire books and manuscripts from Young's estate, see Van Romburgh, ed., 'For My Worthy Freind', 900–903. For arguments against the claim that Vossius or Gale were purchasers at Owen's sale, see Carley, ed., The Libraries of King Henry VIII, xc.

 $^{^{23}}$ See, in particular, AUB, Ms. E. 135 (Woodforde to Vossius, 28 June 1686); Ms. RK III E. 10, no. 20 (Woodforde to Vossius, 23 September 1686, also discussing Gale's work and that of other editors).

²⁴ Grafton, *Scaliger* II, esp. 416–417, 706–707; see also Grafton's contribution to this volume, above, 46–48.

Louis Cappel's Critica Sacra (Paris, 1650).²⁵ Cappel (1585–1658) had treated the Hebrew and Greek texts of the Old Testament as parallel witnesses, partly in order to discredit the notion, commonly held by his fellow Protestants, that the contemporary Hebrew Bible, including its vowel points, represented the original state of the text. New publications of the mid-1650s inflamed these issues still further, above all Isaac La Pevrère's Praeadamitae (several editions, including Leiden and Amsterdam, 1655) and the Jesuit, Martino Martini's Sinicae historiae decas prima (Munich, 1658; Amsterdam, 1659). La Pevrère's work, which playfully engaged with writings by Grotius and others about the peoples of the New World, argued that Adam and Eve had been the parents of the Jews, and that, at the time of their creation, the Gentiles already existed. They peopled the whole of the earth outside Eden, and, at the Fall, Adam's sin was imputed back to them. Many of the events related in the Old Testament thus affected the Jews alone, and Noah's Flood, for example, had been confined to Palestine. This was an ingenious, if potentially deeply heterodox, solution to some of the problems created by contemporary debate about the authenticity of the text and chronology of the Bible. ²⁶ It again produced great hostility and public debate among theologians in the Netherlands.²⁷ Martini's work was no less threatening, since it distinguished real from mythical emperors, basing itself on Chinese chronological records, in a manner which appeared to demonstrate that the earliest Chinese dynasties for which there was clear evidence predated the accepted time of the Flood.²⁸

In 1658, Vossius had recently completed his edition of the geography of the first-century writer, Pomponius Mela. This was perhaps the most important scholarly fruit of Vossius' efforts during the 1650s, much of which he had devoted to the pursuit of powerful patronage and the ordering of his father's legacy. In it, Vossius showed off the command of a range of manuscript materials, drawn from Italy, England, and Sweden, that was already characteristic of his distinctive contribution to classical and Christian scholarship. His commentary also touched on issues raised by the text of Pomponius Mela that resonated with contemporary debate and controversy. These included the relationship of dynastic histories to

 $^{^{25}\,}$ See Lebram, 'Ein Streit um die Hebraïsche Bibel und die Septuaginta', 20–63; Laplanche, L'Écriture, le sacré et l'histoire, 181–327; Schnedermann, Controverse des Ludovicus Cappellus. Vossius was aware of Cappel's work even before its publication and followed news of its printing with care: see AUB, Ms. RK III E. 9, no. 4 (Claude Sarrau to Vossius, 26 March 1650).

²⁶ See esp. Popkin, *La Peyrère*; Gliozzi, *Adamo e il nuovo mondo*, 514–594.

²⁷ See, most recently, Jorink, "Horrible and Blasphemous".

²⁸ See Mungello, *Curious Land*, 124–133; Von Collani, 'Theologie und Chronologie'.

the account of Egyptian kings given by Moses and the nature and status of peoples who lived beyond the world known to the ancients.²⁹ On concluding this edition, Vossius turned quickly to more polemical matters, intervening directly in the controversies involving the writings of Cappel, La Peyrère and Martini, on which he had previously only touched.

This was the context in which Vossius published both his father's Chronologiae sacrae isagoge (The Hague, 1659) and his own Dissertatio de vera aetate mundi (The Hague, 1659).30 The two books appeared from the press of Adriaan Vlacq (1600–ca. 1667), variously known to his English exile customers of the time, who also criticised Vossius for siding with him, as 'Flack...the most perverse and peevish ill natured fellow that lives' and, simply, as 'Slack'. 31 These works provided an orthodox account of the different biblical chronologies by the elder Vossius, together with a daring solution to their problems by his son.³² The younger Vossius clearly took pleasure in twitting his rivals at Leiden, where his friend and tutor, Saumaise, had been constantly dissatisfied. Vossius later wrote that he 'expect[ed] nothing good' to come out of people from Leiden.³³ Leiden was the meeting place where the orthodox scholars who had been involved in the production of the authorised translation of the Bible into Dutch, the Statenvertaling (Leiden, 1637), came together to revise and print their work. The chance to expose the frequent subservience of this endeavour to rabbinical learning, and their comparative neglect of Septuagint readings, was perhaps one of the remoter and most ambitious targets for Vossius.³⁴ Certainly, he was not against the idea that he had found a new key to biblical interpretation. He deployed the chronology of the Septuagint to reinterpret traditional history, in the process suggesting also that this was compatible with the theory of a limited flood. In one stroke, he set himself up as a challenger to Scaliger; an orthodox critic who had pulled the rug from under La Peyrère's heterodoxy, and a powerful historian whose work altered the balance in the textual debate between the arguments of

²⁹ Vossius, *Observationes ad Pomponium Melam*, esp. 57 (2nd pagination), 310–315.

³⁰ The two books were both in print by early February, see AUB, Ms. RK III E. 9, nos 202 (G. Henschenius to Isaac Vossius, 16 February '1658' [i.e. 1659]) and 213 (Thomas Browne to Isaac Vossius, March 1659).

 $^{^{31}}$ OBL, Mss Clarendon 67, fols 103–104; Clarendon 72, fol. 106°. See also Keblusek, Boeken in de hofstad, esp. 288–304.

³² For a discussion of the elder Vossius' work on biblical chronology, see Wickenden, *Vossius and the Humanist Concept of History*, 124–179.

³³ Isaac Vossius to Andreas Colvius, 19 November 1661: 'A Leidensibus boni nihil exspecto' (LUB, Ms. Pap. 15).

³⁴ See De Bruin, Statenbijbel, esp. 249–293; Verdegaal, Statenbijbel en de rabbijnen.

Cappel and those of his critics. He reinterpreted the evidence that Scaliger had presented concerning the identity and age of the Egyptian dynasties described in the fragments of Manetho, and upheld the chronology of Josephus, about which Scaliger had become sceptical.³⁵ Whereas Scaliger himself thought the world was created in 3,950 BC, he concluded that the period of the Septuagint had begun in 5,500 BC. Vossius asserted instead that the world was currently 7,048 years old (that is that creation could be dated to 5,390 BC). As a result, the earth was precisely 1,440 years older than Scaliger, who had not himself followed the Septuagint chronology, believed it to be.³⁶ By adopting and adapting the longer chronology of the Greek rather than following that of the Hebrew Old Testament, moreover, Vossius hit upon the same solution to the problem of Chinese chronology as was taken up by the Jesuits in the Far East themselves. In this, he may have been influenced directly by Martini, who spent some months in Amsterdam in the winter of 1653 and the summer of 1654 to see his publications, especially an atlas of China, through the press.³⁷ In each of these scholarly choices, Vossius twitted La Peyrère and those who doubted that biblical chronology and pagan history could be brought to concur. Thus, despite his partisanship for the Septuagint, and in the view of his orthodox friends at least, Vossius had 'imposed silence on the atheists by making Moses agree with profane history'.38

³⁵ Vossius, *De vera aetate mundi*, XLII–XLIV; on Josephus: XXIII–XXIX.

³⁶ Grafton, Scaliger II, 662–664; Vossius, De vera aetate mundi, LV. See also Jorink, Boeck der Natuere', 102–111.

³⁷ Accounts of the relationship between Martini and Vossius are confused. Weststeijn, 'Spinoza sinicus', 537-561, is correct to notice Vossius' early reading of Martini, reflected in the references given in his Castigationes, esp. 38-42, whose dedication was dated 18 May. Weststeijn, however, is wrong to assert (544) that Martini stayed in Amsterdam himself until 1658. For details of Martini's travels from China to Amsterdam and then to Antwerp, Louvain, Rome, and eventually Lisbon, where he remained for a year before taking a ship back to the Far East in 1657, see Walravens, *China illustrata*, 112–115; Martini, *Opera omnia* I, 522-528. See also Lindgren, 'Wissenschaftshistorische Bemerkungen'; Grafton, Worlds Made by Words, 31, claims that Vossius 'helped to arrange the reprinting in Amsterdam of the Jesuit Martino Martini's history of China'. I can find no evidence for this, although both the atlas and the second edition of Martini's Sinicae historiae were published by the firm of Blaeu, and Vossius did act from time to time as an intermediary between scholarly friends and Joan Blaeu (see Blok, 'Isaac Vossius and the Blaeus'). Martini did, however, help Vossius' former teacher, the Leiden Professor of Arabic and Mathematics, Jacobus Golius to learn to read some Chinese, and Golius' observations on Chinese time-keeping and other subjects were published with Martini's atlas: see Witkam, Golius en zijn handschriften, 61-62.

³⁸ Samuel Bochart to Vossius, Good Friday [11 April], 1659: 'imposer silence aux athees en accordant Moyse avec l'histoire profane' (AUB, Ms. RK III E. 9, no. 216); cf. Emery Bigot to Isaac Vossius, 7 March 1659 (no. 215). Bigot wrote from Paris and communicated the

Vossius' work was deliberately controversial, a pamphlet rather than a learned treatise. Controversy was sustained by the publication of a number of replies by Leiden professors, and by Vossius' own printed answers to them.³⁹ *De vera aetate mundi* was translated into Dutch in 1660.⁴⁰ In 1661, Vossius gathered his writings and those of some of his opponents together in another Latin book.⁴¹ Here, Vossius expanded both his arguments and his replies to his critics, and introduced his own canon of sacred chronology to supplant that of his father. Once again the book was viciously attacked by traditionalist critics, especially those with associations with Leiden University.⁴² By now, the controversy was attracting international attention, not least among English scholars and critics, some of whom Vossius knew well from the world of exiles in The Hague and elsewhere.⁴³ Vossius had dedicated *De Septuaginta interpretibus* to the former Royalist Aubrey de Vere (1627–1703), twentieth Earl of Oxford. He did not himself know de Vere, who had been brought up in Friesland by a Dutch mother

view that Cappel would be pleased if he saw Vossius' work and explaining that others, notably Jean Daillé, were impressed with Vossius' hand in exploding the most heterodox aspects of La Peyrère's book.

³⁹ Esp. Hornius, *Dissertatio*; Idem, *Defensio*; Idem, *Auctarium*. Cf. Marquard Gude to Isaac Vossius, 4 May 1659, writing from Leiden in support of Hornius (AUB, Ms. RK III E. 9, no. 223). For Vossius' replies to these, see the discussion below, at n. 58.

⁴⁰ Vossius, Discours.

 $^{^{41}}$ Vossius, $De\ Septuaginta\ interpretibus;$ Vossius published additional replies to his critics in 1663: Appendix.

⁴² For example, Coccejus, *Iudaicarum responsionum consideratio*. Coccejus was Professor of Theology at Leiden; Vossius' own copy, with his scathing notes on Coccejus' attempts to protect the integrity of the Hebrew text and to deny ancient evidence for the use of the Septuagint in Judaism and in the Church, may be found at LUB, shelfmark 510 C 16. See also Yoffie, 'Cocceius and the Jewish Commentators'. Vossius' annotated copy of Hulsius, *Authentia absoluta* is LUB, shelfmark 499 F 3. Hulsius would later teach Hebrew at Leiden and was also one of the first critics of La Peyrère. A few of Vossius' annotations, mostly connected with the works of Origen, may be found in his copy of another attack that he answered in print: Schotanus, *Diatribe*: LUB, shelfmark 513 F 4. I am grateful to Dirk van Miert for inspecting this last item for me. Vossius was urged to reply publicly to these critics by his boyhood friend, Coenraad van Beuningen (see Van Beuningen to Vossius, 11 March 1662, AUB, Ms. RK III E. 10, no. 255).

⁴³ See nn. 30 and 31 above; see also [Johann Ludwig] Fabricius to Isaac Vossius, 28 March 1661, from Heidelberg (AUB, Ms. RK III E. 10, no. 253); Gosvinus Hogersius to Johannes Fredericus Gronovius, 22 May 1659, from London (Munich, Bibliothek der Ludwig-Maximilians-Universität, Ms. 2° Cod. 616, fols 129–130). Cf. the contacts maintained by Hornius throughout the 1650s with the intelligencer, Samuel Hartlib and his circle in London: Sheffield University Library, Hartlib Papers, 60/7/1A-6B; 16/2/1A–36B (esp. Hornius to Hartlib, 24 March 1659 (16/2/23A–B), discussing the chronologies of Vossius and Ussher); also the copies of correspondence between Hornius and Hartlib and notes on Vossius, *De Septuaginta interpretibus*, collected by John Pell, who had lived in the Netherlands between 1643 and 1652 (LBL, Ms. Add. 4365, fols 184^r–187^v).

and had served as a soldier in the Netherlands during the 1640s, but contact between the two was brokered by Vossius' uncle, Franciscus Junius, who had been the Earl's tutor.⁴⁴

Despite this, the study of the Septuagint did not provide an immediate springboard for Vossius into English culture and patronage just after the Restoration. Nevertheless, as we have seen, it was for his knowledge of the Septuagint, as much as anything, that Vossius was valued when he did settle in England after 1670. The controversy of the late 1650s and early 1660s had helped to make his name as a man who might rewrite the Bible, and, in the 1670s, the opportunity to fulfil this promise appeared to be constantly on the horizon. Thereafter everything increasingly went wrong for Vossius' interpretation of the Septuagint, as the remainder of this essay will endeavour to demonstrate.

The Renewal of a European Debate

Isaac Vossius' nephew and heir, the younger Gerardus Joannes Vossius (1645–1716/17), said of his uncle:

that when he had books sold at auction, he would give them grand titles in [the] catalogue, and that once he had stated next to a little tractate of minor importance that in it was demonstrated mathematically that the Pope at Rome was the Antichrist; and that subsequently it had made thirty guilders, even though it was not worth thirty stuivers.⁴⁵

 $^{^{44}}$ See Slater, 'Aubrey de Vere'; cf. Vossius, *De Septuaginta interpretibus*, sigs a2^r–3^v; Van Romburgh, ed., 'For My Worthy Freind', 9, 730–731, and esp. 910–917 (Junius to Vossius, [after 8 July 1659]).

⁴⁵ Vossius seyde, dat als sijn oom boecken deed verkoopen in auctien, hij die met groote tytelen in[de] Catalogus opschickte, en[de] dat eens bij een Tractaatje van weynigh importantie gestelt hadde, dat daerin mathematicé gedemonstreert wierd, dat de Paus van Roomen den Antichrist was; dat het daerop in[de] 30 g[u]l[den] gegolden hadde, hoewel geen 30 st[uivers] weerdt was' (Journaal van Constantijn Huygens, den zoon I, 369-370, 4 December 1690): See also the contribution by Astrid Balsem to the present volume below, p. 281. Jorink, Het 'Boeck der Natuere', 107, inexplicably attributes authorship of the tractate to Isaac Vossius himself and bemoans the fact that it was never published. For Vossius' extensive use of auctions as a means of making money, shaping his collections, and presenting them in the best light, see the works cited in footnote 6 above. See also Isaac Vossius to Gerardus Joannes Vossius, junior, 18 April [1679?] (AUB, Ms. A. 14(a), which includes instructions on bidding at auction and for the buying in of Vossius' own books. This document appears to refer to plans for an unknown auction, and may have been written in the context of cataloguing, moving, and selling books after Vossius had inherited Thomas Browne's library in 1673.) See Astrid Balsem's edition of this letter, below, 307-309.

Joking aside, Vossius' reputation, the wide range of his learning, and the European circulation of his books almost inevitably brought him to the attention of the Roman Inquisition.⁴⁶ He had several unwitting brushes with this tribunal, and a number of his works were prohibited at one time or another.

Vossius' writings on the Septuagint first came to the attention of the Congregation of the Index in November 1662, and were soon sent out for assessment by Joannes Nicheus and Horatius Quaranta. 47 The context for this was the sixth rule established by the post-Tridentine Roman Inquisition, which sought to safeguard the status of the Vulgate (the Latin translation of the Bible which had been prepared by St Jerome at the close of the fourth century AD, whose use had been endorsed by the Council of Trent, and which had been edited and republished under the sponsorship of Pope Sixtus V and Pope Clement VIII), and to prohibit the circulation of controversial works that compared translations of the Bible, especially those into contemporary European vernaculars. 48 The reports of the two consultores highlighted suspicions of Vossius' intentions, although, as was normal with such investigations, they were careful to praise the erudition of his book and to distinguish between controversial positions that were permitted, for example as a consequence of disagreement amongst the Church Fathers, and those which came closer to contradicting points of doctrine that had been established at the Council of Trent. The opinions of the consultores were learned contributions to debate about the status of particular books, which aimed to clarify controversies and orthodoxies, and their conclusions were necessarily provisional.⁴⁹ Neither Nicheus nor Quaranta was sure quite what to make of Vossius' partisanship for the Septuagint. Suspicious of the intentions of any Dutchman, even a layman like Vossius, Quaranta wondered whether the book was some kind of Trojan horse or even a satire. Even so, he was willing to countenance Vossius' highly controversial treatment of the deluge at the time of Noah,

⁴⁶ See, in general, Black, *Italian Inquisition*, esp. 158–207.

⁴⁷ VCC, Diario VI (= I.6 = Acta 1655–1664), 206, 212, 217.

⁴⁸ Rule VI also allowed Catholic bishops to license the use of vernacular bibles. For a discussion of its effects, see Fragnito, 'Per una geografia delle traduzioni bibliche', esp. 74–75. More generally, see Fragnito, *La Bibbia al rogo*; Grendler, *Roman Inquisition*, esp. 146–147. On the status and editing of the Vulgate in this period, see Höpfl, *Beiträge*; for the importance of confessional criteria in promulgating the Sixto-Clementine Vulgate in 1592, see Van Boxel, 'Robert Bellarmine'.

⁴⁹ For the working of the Roman Inquisition and its advisors, see particularly Godman, *Robert Bellarmine*, esp. 3–99; Neveu, *L'Erreur et son juge*, esp. 239–381; Van Boxel, *Rabbijnenbijbel en Contrareformatie*, 129–170; Fragnito, ed., *Church, Censorship and Culture*.

and his endorsement of the thesis that the biblical flood had been limited rather than universal.⁵⁰ In the end, in July 1663, the Congregation of the Index decided that it probably ought to prohibit Vossius' *De Septuaginta interpretibus*, but that it should suspend publicising its judgement until his other works had been examined.⁵¹

At the end of January 1686, the great Parisian Benedictine scholar and student of manuscripts, Jean Mabillon (1632–1707), was more than half way through the second of the stops that he and his companion, Michel Germain (1645–1694), would make in Rome during their fifteen month journey across the Italian Republic of Letters.⁵² Writing to Claude Bretagne (ca. 1625–1694), their prior at St. Germain des Prés, Germain commented on a 'mark of honour', which would have enabled his *confrère* to remain in Rome, regardless of the commands of his superiors, should he have wanted to do so.⁵³ This distinction was an invitation, procured by Cardinal Girolamo Casanata (1620–1700), for Mabillon to address the Congregation of the Index, and to give his opinion on several works by Isaac Vossius.⁵⁴ Mabillon's disciple and biographer, Thierry Ruinart (1657–1709), described the scene that resulted on 29 January 1686:

in the presence of nine Cardinals and the Master of the Sacred Palace, he had the honour of making his report dealing with the book of Isaac Vossius about sacred chronology and the age of the world, in which that author is of the opinion that the deluge did not inundate universally the entire earth, although he claims that all the people there perished. Father Mabillon talked about that matter, which seemed rather delicate, with a wisdom that caused all their Eminences to admire him, and effectively to content themselves with his opinion. 55

⁵⁰ VCC, Protocolli LL (= II^a34 = 1661–1663), fols 167^r–172^r. Following Vossius himself, Quaranta suggested that support for the idea of a limited flood might be found in the works of Theodoret and Justin Martyr, perhaps having in mind Pseudo-Justin (attributed to Theodoret of Cyrus), *Quaestiones et Responsiones ad Orthodoxos* (cf. Benjamins, 'Noah, the Ark, and the Flood'; Young, *The Biblical Flood*, 27). Cf. Vossius, *De Septuaginta interpretibus*, 279–284, 339–344.

⁵¹ VCC, Diario VI (= I.6 = Acta 1655–1664), 234; cf. the decree of 20 August 1663, for which see De Bujanda, *Index librorum prohibitorum*.

⁵² See Mabillon and Germain, *Museum Italicum*; Valery, ed., *Correspondance* I, 175–229; cf. Momigliano, 'Mabillon's Italian Disciples'; Waquet, *Le modèle français et l'Italie savante*, esp. 36–38, 103–105; Barret-Kriegel, *Jean Mabillon*, esp. 67–75.

⁵³ Germain, *Lettres d'Italie*, 151–153, at 153: 'Cette marque d'honneur, qui le retiendrait à Rome malgré les supérieurs s'il en avait envie . . .' (Germain to Bretagne, Rome, 28 January 1686). See also Ultee, *Abbey of St. Germain des Prés*.

⁵⁴ Germain, *Lettres d'Italie*, 74–75 (Germain to Thierry Ruinart, Rome, 25 September 1685); cf. Neveu, 'Culture religieuse et aspirations réformistes'.

⁵⁵ Ruinart, *Abregé de la vie de Mabillon*, 127: 'il eut l'honneur de faire son rapport, en presence de neuf Cardinaux & du Maître du sacré Palais, touchant le Livre d'Isaac Vossius

Mabillon was by no means the first commentator to have been approached by the Congregation of the Index to give an opinion about the writings of Vossius. His conclusions, however, were unusual and revealed an exceptionally subtle attitude to heterodoxy and confessional rivalry. For, contrary to the general tenor of opinion about Vossius in Rome, Mabillon argued that: 'there seems to be nothing dangerous in tolerating Vossius' conjecture, so much so that it should be possible to forebear from censoring him.'⁵⁶ In the end, Mabillon concluded that, since Vossius' work 'had already been published by its author thirty-five years before, and had not caused turmoil or factions among Catholic scholars but only among the heretics', it should not now be placed on the Index of prohibited books.⁵⁷

In his assessment, Mabillon considered a group of Isaac Vossius' writings, which had first been published together in 1661.⁵⁸ He did not have access to all of the comments of the Leiden professor of history Georg Hornius (1620–1670), to whom Vossius was in part replying. Hornius had been a consistent critic of Vossius' arguments for the antiquity, purity, and authority of the Septuagint. Mabillon appeared slightly confused about Hornius' identity, and was thus probably unaware of his remarkable end, which shocked the republic of letters. Perhaps as a consequence of the tobacco to which he was addicted, but more likely because he had been defrauded by an alchemist from The Hague, who had tricked him out of five thousand guilders, Hornius had ended his days insane. On one occasion, he had run mad and quite naked in the streets of Leiden, crying out in Latin: 'And have you ever seen a man from paradise? I am that Adam'.⁵⁹

de la chronologie sacrée & de l'âge du monde, dans lequel cet auteur est du sentiment que le déluge n'a point inondé universellement toute la terre, quoiqu'il avouë que tous les hommes y sont peris. Le Pere Mabillon parla sur cette matiere, qui paroissoit assez delicate, avec une sagesse qui le fit admirer de toutes ces Eminences, & ils s'en tinrent effectivement à son avis.'

 $^{^{56}}$ VCC, Protocolli VV (= II a 44 = 1685–1687), fol. 112': 'nullum videri periculum in toleranda Vossii opinione, atque adeo ab ejus censura posse temperari.' On the attitudes of the Roman Inquisition in this period, see Godman, *Die geheime Inquisition*, 166–201.

 $^{^{57}}$ VCC, Protocolli VV (= II $^{a}44$ = $^{1}685$ – $^{1}687$), fol. 112 r : 'Iam ab annis triginta quinque hanc vulgatam esse ab Auctore, nec turbas illas aut studiorum partes inter Catholicos Doctores inde natas esse, sed tantum inter haereticos...'

⁵⁸ Vossius, *De Septuaginta interpretibus*; this volume contained all the writings of Vossius on which Mabillon was asked to comment directly: *De Septuaginta interpretibus*; *De vera aetate mundi* (first published by Vlacq in 1659); *Castigationes ad objecta Georgii Hornii* (combining two works first published by Vlacq, again in 1659: *Castigationes* and *Auctarium*); Vossius, *Ad Colvium epistola*; Vossius, *Responsio ad objecta Christiani Schotani*.

⁵⁹ Jöcher, *Allgemeines Gelehrten-Lexicon* II, cols 1708–1709: 'Er soll einst ganz nackend auf die Gassen gelaufen seyn, und gerufen haben: *An tu unquam vidisti hominem paradisiacum? Ego sum Adam.*'

Enough had been quoted by Vossius from Hornius' own writings, however, to make Mabillon hesitate, especially since, in the one part of the controversy from Hornius' side which Mabillon had read, Hornius had appeared to accuse Vossius of going over to 'the camp of the Papists' in a particularly scornful fashion. Yet Mabillon's friendly conclusion, that Vossius had made such a good showing against Hornius that it was probably not worth censoring either of them, did not in the end carry the day.

Despite Mabillon's protestations, what principally rekindled the interest of the Roman Inquisition in Vossius' publications was their appearance in Catholic works of scholarship and controversy to which the attention of the censors had also been drawn. The most important and sensational of these was the *Histoire critique du Vieux Testament* by the French Oratorian Richard Simon (1638–1712). Published initially at Paris in 1678, Simon's work had elicited a storm of criticism, leading to his exclusion from the Oratory. 61 Banned by the Conseil du Roi, at the instigation of Jacques-Bénigne Bossuet (1627–1704), then tutor to the Dauphin, Simon's work was reprinted clandestinely at Amsterdam in 1680, and it was this edition that was prohibited by the Congregation of the Index in December 1682.62 Laurentius Boulboul, a member of the Order of Caracciolini, and the consultor who considered Simon's work, was shocked by its denial of Moses' authorship of the entire Pentateuch and its allegations about the corruption of the surviving text of the Bible. Among other difficulties, he noted Simon's own attack on Vossius' attitude to the Septuagint. Simon had argued that Vossius had gone too far to the opposite extreme from those Protestant commentators on Scripture who had been partisans for the inviolability and absolute authority of the Masoretic Hebrew text of the Bible. In its place, Vossius defended the importance of the Septuagint, but in doing so he abandoned proper critical standards, according to which one 'must not rely simply on the authority of the antique Doctors

 $^{^{60}}$ VCC, Protocolli VV (= IIa44 = 1685–1687), fol. 111": 'in *Pontificiorum castra* transire...'; Mabillon was commenting here on Hornius, *Defensio*, 24–26.

 $^{^{61}}$ See Paris, Archives de l'Oratoire, Carton VIII³: Richard Simon (esp. Dossier Bonnardet, 10–12b). This decision was later noted at Rome: see VCC, Protocolli XX (= II a 45 = 1687–1688), fols 18 r –19 v .

⁶² Simon, *Histoire critique du Vieux Testament*. For the first steps taken against Simon's work, see PBnF, Ms. Fonds français 21,743, esp. fols 166–178; Sauvy, *Livres saisis*, 132; Lambe, 'Biblical Criticism and Censorship'; Shelford, 'Of Sceptres and Censors'; correspondence of Henri Justel with Thomas Smith, 13 October 1677–22 May 1678 (OBL, Ms. Smith 46, fols 258–272). More generally, see Bernus, *Richard Simon*, 96–140; Auvray, *Richard Simon*, esp. 39–53. The Roman prohibition is recorded in VCC, Diario VIII (= I.8 = Acta 1682–1688), pp. 3–5; the book was formally entered in the Index on 11 February 1683.

of the Church, nor wish that the Greek version of the Septuagint might be divine, because the Apostles made use of it, and the earliest Fathers called the authors of that version prophets.'⁶³ Although Simon went on to argue that, had Vossius properly considered the history of the Western Church, as well as that of the Eastern, he would have been forced to accept the ancient authority of the Vulgate, this orthodox conclusion was not what struck Boulboul. Instead, he saw this passage as part of an apparently heterodox argument by Simon ('in the manner of Galileo') that he traced across much of the book: the Bible was subject to inadvertent change over time, and its original was no more recoverable from the Septuagint than it was from the modern Hebrew text.⁶⁴ Simon's argument not only drew the attention of the Inquisitors back to Vossius, it also implicated Vossius in the Oratorian's crimes and, in the same breath, cast doubt over the conclusion that Vossius' ideas might in themselves be harmless for Catholic readers.

Vossius and Richard Simon

By this time, Vossius had already answered Simon in print, in a little book that made abundantly clear that he shared at least one of the inquisitors' reservations.⁶⁵ Vossius and Simon agreed that the Masoretic text of the Hebrew Bible was established later than the time of the first Christian editors of the Bible (in particular, for Vossius, Origen, whose work in compiling the Hexapla would have been unnecessary had the Masoretic text survived from antiquity). Unlike Simon, however, who was more reluctant than many Catholic critics to ascribe variants in Hebrew copies of the Bible to the perfidiousness of the Jews, and in particular, their rabbis, Vossius attacked the Masoretes as ignorant men who had perverted the text of Scripture, not least because, by their time, the sound and pronunciation of Hebrew had been irrecoverably lost.⁶⁶ The eagerness that Vossius showed in distancing himself from the standpoint of reformed orthodoxy,

⁶³ Simon, Histoire critique du Vieux Testament, 539: 'îl ne devoit pas s'en rapporter simplement à l'autorité des anciens Docteurs de l'Eglise, ni vouloir que la Version Grecque des Septante fust Divine, parce que les Apostres s'en sont servis, & que les premiers Peres ont appellé Prophetes les Autheurs de cette Version.'

⁶⁴ VCC, Protocolli RR (= II^a40 = 1679–1683), fols 410^r–412^v (at fol. 411^r: 'More Galilaei...'). ⁶⁵ Vossius, *De Sibyllinis Oraculis*: the criticism of Simon ('Isaaci Vossii ad objectiones nuperae criticae sacrae responsio') appears on sigs ar^r–94^v.

⁶⁶ Vossius, *De Septuaginta interpretibus*, 96–99; Simon, *Histoire critique du Vieux Testament*, 146–162. For Simon's ambivalent, but at times favourable, attitude to Jewish learning and scholarship since the time of Christ, see particularly Simon, *Additions aux Recherches*,

which held that the vowel points introduced by the Masoretes were an integral part of the inviolable text of Scripture, brought him to similar conclusions to those of mainstream post-Tridentine, Catholic scholarship, according to which the testimony of the Fathers demonstrated that the Jews had deliberately attempted to introduce false or misleading readings into the Bible to conceal its Christian message. Such Catholic scholarship could not, however, follow Vossius either in his endorsement of the unique value of the Septuagint version, or in the supporting claim that he made when attacking Simon, that the Sibylline Oracles had also had Jewish origin in Ptolemaic Alexandria and preserved a true witness to prophesies later corrupted by the intervention of rabbis intent on denying that Christ had been the Messiah.

Vossius' friend, the Rouen critic Emery Bigot (1626–1689), reported that Simon believed that the Bishop of London (Henry Compton, 1632–1713) had put Vossius up to answer him.⁶⁹ Although there is nothing to tie Vossius directly with Compton in this context, this conjecture appears plausible. Bigot was perhaps not being entirely straight, since he soon shared letters that he received from Vossius with Simon. On reading them, Simon remarked to Bigot that Vossius 'was not telling the truth, when he informed you that the Bishop of London had begged him on my behalf not to write against my *Histoire critique*, because of the trouble that it had caused me'.⁷⁰ Compton owned one of the two copies of the suppressed, Parisian edition of the *Histoire critique du Vieux Testament* that were sent to England in 1678.⁷¹ He was certainly involved in the publication of the

^{71–73;} Le Brun and Stroumsa, eds, *Les Juifs présentés aux Chrétiens*, xxxii–xlix; Yardeni, 'La vision des Juifs'; Stroumsa, 'Richard Simon'.

 $^{^{67}}$ Cf. VCC, Protocolli RR (= IIª40 = 1679–1683), fols 410 $^{\rm v}$ –411 $^{\rm r}$. Belief that historical Jews had distorted their own religious texts, as part of polemic against Christianity, did not necessarily go hand-in-hand with active hostility to contemporary Jews: see Raz-Krakotzkin, *The Censor, the Editor, and the Text.* In the case of Vossius, who received letters from the Dutch rabbi Menasseh ben Israel, see AUB, Ms. RK III E. 9, nos 31, 37, 76, 193; cf. Offenberg, 'Some Remarks'. In general, see Muller, 'The Debate over the Vowel Points'.

⁶⁸ Vossius, De Sibyllinis Oraculis, 19-24.

⁶⁹ Emery Bigot to Isaac Vossius, Rouen, 12 January 1680 and 5 March 1679 (AUB, Ms. RK III E. 10, nos 86 and 95 respectively). On Bigot, see Doucette, *Emery Bigot*.

⁷⁰ [Simon], *Bibliotheque critique* III, 54–56, quotation at 54: 'il n'y a dit pas la verité, lors qu'il vous a mandé, que Monsieur l'Evêque de Londres l'avoit prié de ma part de ne point écrire contre mon Histoire critique, à cause des affaires qu'on me faisoit sur ce sujet…' Cf. Steineman, *Richard Simon*, 180–184.

⁷¹ Henri Justel to Compton, 13 August 1678 (OBL, Ms. Rawlinson C. 984, fols 27–28); cf. Simon to [Père du Brueil], February 1679 (in Simon, *Lettres choisies* IV, 52–60). See also Bredvold, *Intellectual Milieu of Dryden*, 101–103, 156–158; Harth, *Contexts of Dryden's Thought*, 181–184.

reply to Simon written by Charles-Marie de Veil (1630–1685). De Veil was an exiled Jew from Metz, who had originally been converted to Catholicism by Bossuet. He later went over to Protestantism and came to England at the end of 1677. Compton was one of his principal patrons, until de Veil reneged in turn on the Church of England by becoming a Baptist. There was considerable interest in England about what Vossius might say in response to Simon, although not all of it was favourable. The aging doyen of English Arabic and Hebrew studies, Edward Pococke (1604–1691), told his friend, Narcissus Marsh (1638–1713), who had recently been appointed as Provost of Trinity College, Dublin, that:

I have not so much as seen *Vossius*' Tract of his Sibyls, and such others as are with it; but I am told, that he speaks therein Things that are derogatory to Rabbinical Learning (but that matters not much, as for other Things) and particularly (which is *magis dolendum*) to bring Disrespect and Contempt on the *Hebrew* Bible; and all authoritative, without good Proof or Reason: And I hear, that by some at Coffee-Meetings, it is cried up. It may be suspected, that the Intention is to bring it into Doubt, whether we have any such Thing, as a true Bible at all, which we may confide in, as God's Word.⁷³

Marsh's successor at Trinity College, Robert Huntington (ca. 1636–1701), who was at the time still chaplain to the English Levant Company in Aleppo, wrote to Pococke on 24 May 1681 in much the same vein:

I have not seen *Vossius de Sibyllis*; but to decry the *Hebrew* Text has long been his Design and Practice:...but I am no Judge of Controversy. Whilst Men speak and fight too not for Truth, but Victory, we may well expect heterodox Opinions and seditious Actions.⁷⁴

Others wrote to Edward Bernard (1638–1697), Savilean Professor of Astronomy at Oxford and a former pupil of Pococke, in similar vein. Thomas Broughton, for example, complained about Vossius' criticisms of the Cambridge theologian and Hebraist, John Lightfoot (1602–1675).⁷⁵

⁷² De Veil, Lettre de Mr. de Veil; Samuel, 'Charles-Marie de Veil'. De Veil's work, although written from the Bishop of London's residence at Fulham, appeared before Compton obtained his copy of Simon's book. This may suggest that Bossuet, with whom de Veil remained in contact, was the principal source of his information about Simon.

 $^{^{73}}$ Twells, ed., Theological Works of Pocock I, 74. On Pococke and Marsh, see Toomer, Eastern Wisedome and Learning, esp. 212–226, 287–289; Hunter, 'Boyle, Marsh and the Anglo-Irish Intellectual Scene'.

⁷⁴ Twells, ed., *Theological Works of Pocock* I, 75; on Huntington, see Smith, ed., *Huntingtoni Epistolae*.

 $^{^{75}}$ Broughton to Bernard, 2 February 1679 (CKB, Ms. NKS 1675 2°, no. 17); on Bernard, see Smith, $\it Vita~Bernardi.$

Vossius, Edward Bernard, and Josephus

For Bernard himself, however, friendly relations with Vossius remained important, since he wanted to ensure that he received Vossius' help (and information about manuscripts that Vossius owned or had seen) in connection with his project of editing the works of the first-century Jewish historian Josephus. For Vossius' work on the Septuagint retained powerful allies in England for the time being. In part, this was a reflection of the long-term interest in Vossius' activities and collections of John Fell. Fell was now Bishop of Oxford and continued to be the dominant figure in the re-establishment of the Oxford University Press, by whom Vossius' little book on the Sibylline Oracles was in due course published. Henry Dodwell (1641–1711), later Camden Professor of History at Oxford, planned to draw up criticisms 'against my excellent Fr[iend] Dr. Vossius', but

hope[d] to do it so as not to offend him nor any lover of Truth. I think in truth as to the main differences he sided with the Ebrew against the LXXII... but I doubt was not critical in examining Chronological Sums, but took them as he found them already summed up by different Authors, and on different Hypotheses. 78

Dodwell's patron, William Lloyd (1627–1717), then Bishop of St. Asaph and later Bishop of Coventry and Lichfield and, eventually, Worcester, wrote eagerly about Fell's plans for a new folio edition of the Greek New Testament, and solicited Vossius' support for the venture: 'But if it has not been done already, they ought first to have sent to [th]e Oracle'.⁷⁹ John

⁷⁶ For example, AUB, Ms. RK III E. 10, nos 65, 75, 89, 93, 97, 337–339, and esp. 87 (Bernard to Vossius, 9 December 1679), in which he praised Vossius' ingenuity in chronology; Bernard to Johannes Georgius Graevius, 1679 (CKB, Ms. Thott 1258 4°, no. 3), in which he gave a favourable announcement of Vossius' book on the Sibylline Oracles. See also Vossius to Bernard on the chronology of Josephus (AUB, Ms. Cv7); Vossius to Bernard, 15 October and 4 December 1679 (OBL, Ms. Smith 72, fols 1–3). Bernard's own work on Josephus was never satisfactorily completed: for its partial publication, see Josephus, *Antiquitatum Iudaicarum libri quatuor priores*.

 $^{^{77}}$ See AUB, Ms. RK III E. 10, nos 98, 140¹, 319-329. For the distribution of this work to Vossius' Dutch friends and patrons, see Isaac Vossius to Gerardus Joannes Vossius, junior, [1680] (AUB, Ms. R. 42).

⁷⁸ Dodwell to Bernard, 2 September 1680 (CKB, Ms. NKS 1675 2°, no. 25); cf. Dodwell, *Discourse*, 16 (praising Vossius), 115–118 (implicitly criticising him); Samuel Parker to Dodwell, 13 November 1680 (OBL, Ms. Cherry 23, fols 325–326). On Dodwell, see Quantin, 'Anglican Scholarship Gone Mad?'. For Dodwell's later correspondence with Vossius, see AUB, Ms. RK III E. 10, nos 6, 7, 41, 271, 277.

⁷⁹ Lloyd to Vossius, 13 August 1684 (AUB, Ms. RK III E. 10, no. 36). This letter is misidentified by Katz, 'Isaac Vossius and the English Biblical Critics', 177. On Lloyd, whose

Pearson, by now Bishop of Chester, urged Bernard to make use of Vossius' work on the chronology in his edition of Josephus, suggesting that only by using Vossius' calculations could the Septuagint, Josephus, and the surviving fragments of the Babylonian chronology reported by Berosus be made to concur on the interval between Noah's flood and the date of the birth of Abraham.⁸⁰

Edward Bernard was initially hampered in commenting on Simon by the fact that only two copies of his work had reached England. He had no doubt at this stage that he would choose to side with Vossius, not least because of the powerful pull of the historical evidence for the antiquity and authority of the Septuagint provided for English critics by Codex Alexandrinus. Bernard's views, indeed, echoed very closely those of another of Vossius' friends, the diplomat and numismatist Ezechiel Spanheim (1629–1710). See Spanheim, whom A.E. Housman memorably summed up as possessing 'an erudition almost redeeming his want of a critical faculty', published his own attack on Simon anonymously in 1679. He was certainly very familiar with Vossius' ideas about the Septuagint and thus may well have borne even more responsibility than Bishop Compton for encouraging Vossius to go into the lists against Simon under his own

comment may allude to Vossius' work on the Sibylline Oracles as much as to his perceived authority on textual matters, see Hart, *William Lloyd*.

⁸⁰ Pearson to Bernard, 8 December 1679, with Bernard's notes in response (OBL, Ms. Smith 5, 353–354). Cf, Vossius, *De Septuaginta interpretibus*, 103–240, esp. 106–109; Pearson to Bernard, 3 January 1679 [i.e. 1680] (OBL, Ms. Smith 72, fols 41–43). For the fragments of Berossus, which were known to Pearson and Bernard primarily through Joseph Scaliger's excavations from the text of Syncellus, see Adler and Tuffin, eds, *Chronography of Synkellos*; Grafton, *Scaliger* II, 681–728.

⁸¹ For evidence of Vossius' high opinion of this manuscript, which he believed to preserve the text as edited by Hesychius, and thus to antedate Origen's own editorial work on the Septuagint, and which he argued had been consulted by St Cyril, when Bishop of Alexandria, see the account of his ideas given in [Spanheim], *Lettre à un ami*, ed. Simon, 620–621.

⁸² See Ezechiel Spanheim to Bernard, 28 July 1679 (OBL, Ms. Smith 5, 305-312).

^{83 [}Spanheim], *Lettre à un amy*. This work is dated 10 December 1676, and was written in England, presumably on the basis of an inspection of Compton's copy of Simon's work (although perhaps from the second copy, which belonged to the Earl of Clarendon). It is frequently catalogued (for example, by the British Library) incorrectly under the authorship of Spanheim's younger brother, Friedrich (1632–1701), who was Professor of Theology at Leiden University from 1670. Both Bernus, *Richard Simon*, 100, and Auvray, *Richard Simon*, 237 attribute it to Ezechiel Spanheim. Bernard wrote to Spanheim 'apud Villa[m] Vossiana[m]' about Simon in 1679 (OBL, Ms. Smith 5, 355–356). Ezechiel Spanheim was certainly staying with Isaac Vossius at Windsor in September 1679: see Berlin, Staatsbibliothek, Ms. Spanheim 44, fol. 73v. More generally, see Danneberg, 'Ezechiel Spanheim's Dispute with Richard Simon'. For the quotation, see Manilius, *Astronomicon* ed. Housman, I, xlv.

steam. Set Nevertheless, and despite his enthusiasm for Spanheim, Bernard was eager also to know in more detail what Simon himself thought of Vossius and what he would say in reply to him. Set 10^{10}

Simon Strikes Back

Simon was indefatigable in answering his critics. He told Bigot that he was delighted that Vossius had attacked his work, since it allowed him to justify it. Simon was generally dismissive of Vossius' criticism: his work had 'more subtlety than solidity'; his letters would be worth publishing 'more for the beauty of their Latin, than for the depth of their contents'. He replied to de Veil in both French and Latin, to Spanheim in French, Latin, and English, and to Vossius in English and Latin. The simon and his

⁸⁴ For further evidence of Spanheim's discussions with Vossius about the text of the Septuagint, see Berlin, Staatsbibliothek, Ms. Spanheim 72b ('Notas tumultuarum in lectione LXX interpretum'), esp. the adversaria on Genesis 3:15.

⁸⁵ Bernard to Henri Justel, 13 February 1680 (OBL, Ms. Smith 5, 363).

⁸⁶ [Simon], *Bibliotheque critique* III, 54 ('plus considerables pour leur belle latinité, que pour le fond des choses'); also 37 ('plus de subtilité, que de solidité').

⁸⁷ In strict chronological order, see [Simon], Réponse à la lettre de M. Spanheim (1680); Simon, Critical History of the Old Testament, trans. H[enry] D[ickinson] (1682), fourth pagination, 41-90 (replying to Spanheim); [Simon], Disquisitiones criticae (edited by Robert Denison, 1684), 221-279 (replying to Vossius); [Simon], Critical Enquiries (edited by Robert Denison, trans. N.S., 1684), 247-307 (replying to Vossius); Simon, Histoire critique du Vieux Testament (published at Rotterdam by Reinier Leers, 1685), 547-562 (reprinting and replying to de Veil); 563-667 (reprinting and replying to Spanheim); Simon, Historica critica Veteris Testamenti, trans. Noël Aubert de Versé (new edition, 1685), 1-16 (reprinting and replying to de Veil); 17–124 (reprinting and replying to Spanheim); 125–239 (reprinting and replying to Vossius); Simon, Opuscula critica adversus Isaacum Vossium (allegedly printed at Edinburgh by John Calderwood; in fact printed at Rotterdam by Leers, 1685). The history of the English translations and editions of Simon is complex: see Ward, 'Religio Laici and Father Simon's History'; Champion, 'Père Richard Simon and English Biblical Criticism'. Neither of these considers the Opuscula critica, which claimed, however, to have been commissioned by the libertine friend of Simon, Whig plotter, and suicide, John Hampden (1653-1696), who had also been the dedicatee of Denison's editions. For Simon's discussions of editions of his works with Hampden, see Simon, Lettres choisies I, 218-247. Hampden's later claim (in 1688) that Simon's work had led him into libertinism proved a clerical cause célèbre in England when it was disclosed after his death, see LBL, Ms. Sloane 3229, fols 183^r–186^v; Nottingham University Library, Mss PW 2 Hy 227–228; Cambridge University Library, Ms. Add. 36, pp. 143-144. There was a genuine Edinburgh bookseller called John Calderwood, who was active between 1676 and his death in 1682 (see Plomer et al., Dictionary of the Printers and Booksellers, 63; see also ESTC R231404, printed for Calderwood by William Caron). The ornaments used in the Opuscula critica, however, appear in Leers' stock (compare Simon, Opuscula critica, sigs Aiv-2r, with Simon, Histoire critique (1685), 511 and Simon, Réponse, 1).

publishers, particularly the Dutch bookseller, Reinier Leers (1654–1714), inflamed the controversy by reprinting hostile critiques, alongside Simon's responses.⁸⁸ Blast and counter-blast echoed from the presses, as Simon and Vossius presented their respective claims for and against the patristic evidence for the antiquity of the surviving text of the Septuagint and its priority over the Hebrew in the use of the early Church and according to the witness of other ancient versions of the Bible. As the battle heated up, tempers frayed. Vossius accused Simon of Spinozism and Simon countered by pointing out that Vossius appeared to prefer apocryphal texts to the accepted canon of the Church.89 Henri Justel (1620-1693), a Huguenot scholar and controversialist who had left France in 1681 and was now assistant librarian at the English Royal Library in St. James's Palace, had been instrumental in conveying knowledge of Simon's work to England in the 1670s. Now, Paul Colomiès, Vossius' old friend and client, who had become librarian to Archbishop Sancroft at Lambeth Palace, described for him how English scholars responded to Simon's work, in particular to his scepticism about the authority of Codex Alexandrinus, which was currently in Justel's care. In the process, Colomiès constructed an encomium to seventeenth-century English scholarship on the Septuagint, so much of which had focussed on the idea of an edition of Codex Alexandrinus (a task which remained, however, unfulfilled). Among those whom he felt Simon had represented unfairly in one way or another, he named Pearson; Patrick Young; Arnold Boate (1606–1653), and his patron, James Ussher, but the star in his firmament remained Vossius, in whose cause Colomiès allowed his letter to be published.90

⁸⁸ See n. 87 above. De Veil, in particular, complained about this practice: see De Veil, *Lettre à Mr. T. Maimbourg*, 1–5. Cf. Lankhorst, *Reinier Leers*, 56–59.

⁸⁹ See, again in chronological order, Vossius, *Variarum observationum liber*, 207–397 (reprinting *De Sibyllinis*, together with its criticisms of Simon, and adding, at 343–397, a reply to [Simon], *Disquisitiones criticae*, 221–279); 'Hieronymus Le Camus' [=Richard Simon], *Judicium de nupera Isaaci Vossii ad iteratas Simonii objectiones responsione*, printed in Simon, *Opuscula critica*, second pagination; Vossius, *Observationum ad Pomponium Melam appendix*, 75–122. On this debate, see also Müller, *Kritik und Theologie*, 61–62.

⁹⁰ Colomiès to Justel, 3 October 1685 (Vossius, *Observationum ad Pomponium Melam appendix*, 125–136). Cf. [Pearson, ed.], *Vetus testamentum graecum*; Young, ed., *Catena graecorum patrum*; Ussher, *De Graeca Septuaginta*. In practice, Pearson had printed the text of the Septuagint from editions based on other manuscripts, and both Ussher and his disciples remained sceptical of the status claimed by others for Codex Alexandrinus, which Young, however, did intend to edit. See also Horbury, 'The Septuagint in Cambridge', 20–23.

Renewed Responses from Rome

For the Roman Inquisition, the development of this controversy proved more and more troubling. As Simon expressed his ideas in more polemical form, their incompatibility with Tridentine doctrines about Scripture became increasingly apparent. Commenting on Simon's final reply to Vossius, the procurator general of the Dominicans, Giacomo Ricci, contrasted Simon's criticisms of the erudition of Jerome, and his use of Jewish sources when working on the Vulgate, with the more positive view of Jerome set out by Cardinal Bellarmine. 91 He acknowledged that the text of the Vulgate had indeed developed over time, as Simon had pointed out, but maintained that this had been a process superintended by the Church, and in keeping with Jerome's own principles of scholarship. Anxiety about the content of Simon's work fed off paranoia about his skill in exploiting clandestine publication and the willingness of booksellers to carry his titles under the counter.⁹² In the background, judgement was coloured by concern about the influence of Augustinian theology on Simon's arguments about the Church and Scripture. This, in turn, threatened to associate the entire debate with the most significant controversy in the contemporary Catholic Church, and further to complicate the already fraught relationship between the Pope and Louis XIV in the context of the condemnation of Jansenism. 93 Those whom the Congregation of the Index asked to consider Vossius' work were now doing so in a context quite different from that of the historical reception of publications that had appeared more than twenty years earlier, to which Mabillon in particular had alluded. Unsurprisingly, once a critical eye was cast over doctrinal statements made by Vossius, his scientific as well as his critical and historical work appeared to be theologically suspect, viewed from the standpoint of Catholic orthodoxy. In a succession of decisions reached in 1686, the Congregation of the Index condemned Vossius' various publications on the Septuagint, his treatise on the Sibylline oracles, his edition of

⁹¹ VCC, Protocolli XX (= II^a45 = 1687–1688), fols 242–245. Cf. Simon, *Opuscula critica*; Bellarmine, *De scriptoribus ecclesiasticis*, 154–168.

 $^{^{92}}$ VCC, Protocolli VV (= II^a44 = 1685–1687), fols 310–11; Protocolli XX (= II^a45 = 1687–1688), fol. 16°.

⁹³ For a discussion of Simon's Augustinianism, see Ranson, *Richard Simon*; see also Fréville, 'Richard Simon'.

the epistles of Ignatius, *Epistolae genuinae S. Ignatii martyris*, and even his work on the nature of light, *De lucis natura et proprietate*.⁹⁴

The consultores who considered Vossius' works in the mid-1680s attacked his criticisms of Tridentine orthodoxy concerning the composition and translation of the Bible and his modifications of Aristotelian orthodoxy in natural philosophy, in particular his use of a vacuum and his suggestion that the moon might be habitable. 95 Mabillon's more emollient attitude to some of Vossius' work was, however, shared by other outsiders whom the Inquisition consulted. Raffaello Fabretti (1618–1700), the antiquary who acted as a guide for Mabillon and Germain while they were in Rome, had himself reported to the Inquisition in September 1685 concerning Vossius' Dissertatio de vera aetate mundi, as well as the other tracts published with De Septuaginta interpretibus in 1661. Like Mabillon, whom he perhaps recommended to the Congregation of the Index, Fabretti pointed out that Vossius appeared more moderate than many other heretics, and that his work treated subjects that were matters of historical rather than doctrinal truth. He went to some trouble to explain how a local flood might indeed have occurred, and to suggest that it might be compatible with an orthodox reading of Genesis 8, before concluding, somewhat mischievously, that opponents of such an interpretation 'could not have failed to please all the holy Fathers... who did not allow the rotundity of the earth or [the existence of] the Antipodes.'96 Although both Fabretti and Mabillon stacked up patristic and orthodox witnesses to support the idea of a local flood, neither mischief nor moderation was sufficient to counter the general sense that Vossius had denied a miracle. 97 In the process, he had distorted the witness of the Fathers and, by his arguments in favour

 $^{^{94}}$ VCC, Diario VIII (= I.8 = Acta 1682–1688), 121–124; cf. De Bujanda, $Index\ librorum\ prohibitorum.$

⁹⁵ For criticism of *De lucis natura*, see particularly VCC, Protocolli RR (= II^a40 = 1679–1683), fol. 512; Protocolli TT (= II^a43 = 1684–1685), fols 406–409. For criticism of: *De Sibyllinis oraculis*, see Protocolli TT, fols 417–420, and Protocolli VV (= II^a44 = 1685–1687), fols 189–192. On *De lucis natura*, see the essay by Dijksterhuis in this volume.

 $^{^{96}}$ VCC, Protocolli TT (= II $^{a}43$ = $_{1}684$ – $_{1}685$), fols $_{4}87$ – $_{4}90$, at fol. $_{4}90^{r}$: '…iis omnibus sanctis Patribus non potuisse non placere, qui rotunditatem globi terrestris, et antipodas non admiserunt…' Fabretti's ironic point is that none of the Fathers truly denied the possibility that the earth was a globe, and that no sensible critic would suggest that they had. Cf. Russell, *Inventing the Flat Earth*.

 $^{^{97}}$ Cf. n. 56 above. Fabretti invoked the testimony of Justin Martyr (VCC, Protocolli TT (= $II^a43 = 1684-1685$), fols 488^v-489^r), whereas Mabillon (Protocolli VV (= $II^a44 = 1685-1687$), fols 110^v-111^r) drew on Augustine's theory of the interpretation of Scripture and on the argument of Thomas de Vio Cajetan and others that at least one mountain in paradise must not have been covered by the flood, to enable the preservation of the lives of Enoch

of the chronology and witness of the Septuagint, inevitably appeared to cast the Vulgate in a poor light.⁹⁸ Repeated reports on Vossius' works during the mid-1680s, as well as comments on the clearly heretical or heterodox controversial writings that engaged with Vossius' arguments, eventually made it impossible for the Congregation of the Index to hold back from prohibiting them.

The End of an Era

It is unlikely that Vossius himself knew much, if anything, of the process by which his works entered the index of prohibited books. Nevertheless, the tide of reputation turned decisively against Vossius' interpretation of the Septuagint during the mid-to-late 1680s. It did so across Europe, not just because of the Inquisition, nor even as a result of Simon's criticisms. What changed matters for Vossius was not just the triumph of an earlier generation of critics, such as Pococke, who remained suspicious of his ideas. Change was not wrought, either, by the acceptance or diffusion of the sentiment that Vossius might be a dangerous libertine, like his friend and companion in English exile, Charles de Saint-Évremond (1610–1703). Nor was Vossius' problem the fact that he had failed to communicate his ideas persuasively to other critics. While any of these reasons might have been enough to ruin even so great an intellectual reputation as Vossius enjoyed, something far worse, if far more straightforward, happened to spoil the closing years of a long scholarly life.

Put simply, the young Oxford critical tyro, Humphrey Hody (1659–1707), proved that Vossius' most potent arguments about the antiquity of the Septuagint and its independence from the editorial history of the Hebrew Bible were wrong. Moreover, he showed that they were based on the preferred *bête noire* of late seventeenth-century critics, a forgery composed much later than the supposed date of the work in question and foisted upon an otherwise unknown pagan author. Hody demolished

⁽and other patriarchs who appeared to have survived the deluge without entering Noah's ark).

 $^{^{98}}$ See VCC, Protocolli RR (= II^a43 = 1684–1685), fols 512–516; Protocolli TT (= II^a43 = 1684–1685), fols 404–405.

 $^{^{99}}$ These are the explanations offered by Katz, 'Isaac Vossius and the English Biblical Critics', 182–183.

¹⁰⁰ Hody, Contra historiam Aristeae.

¹⁰¹ See Grafton, Forgers and Critics.

the authorship and argument of the *Letter of Aristeas*, which purported to be an eyewitness account of the miraculous composition of the Septuagint, proving that it could not have been written by someone familiar with the court of Ptolemy II Philadelphus. He did more than this, since he demonstrated that the likeliest author of the *Letter* would in fact be a later Jewish scholar, of just the kind whom Vossius denigrated. He showed that the sources that Vossius had trusted were unreliable and that the authors whom he had attacked (above all, the third-century biographer, Hermippus) were to be taken seriously.¹⁰²

In other words, Hody outwitted Vossius at his own game, and in a manner that had eluded even as powerful a critic as Richard Simon. Simon, who also identified the writer of the *Letter* as a Hellenistic Jew, made Vossius smart by suggesting that, despite his distrust of Jewish authorities, he had fallen for a rabbinical fable. Hody, by contrast, showed from Hellenistic Greek sources that the history described in the *Letter of Aristeas* was faulty and self-contradictory. ¹⁰³ Furthermore, he analysed the style of the *Letter* to demonstrate that the allegedly contemporaneous documents that made up much of the text, and that were supposedly composed by a variety of authors, must really have been the work of a single, later hand. ¹⁰⁴ To paraphrase his biographer, Samuel Jebb (1693/4–1772):

Hody shows, that it is the Invention of some Hellenist Jew; that it is full of anachronisms & gross blunders; &, in short, was written on purpose to recommend & give greater Authority to the Greek Version of the Old Testament, which from this story hath received the Name of the Septuagint. 105

Most significantly, Hody demonstrated that the surviving text of the Septuagint could not be the product of a single moment of translation, but that different parts of the Greek translation of the Old Testament had their origins in particular moments and places. He deployed a method of showing that the Greek text reflected regional and temporal variations in the

¹⁰² Hody, *Contra historiam Aristeae*, esp. 28–67, 199–226, 241–312. This critique was amplified in Hody, *De Bibliorum textibus*, 110–217. This part of Vossius' argument was noted with approval by at least one contemporary English reader, see the anonymous notes on *De Septuaginta interpretibus* preserved in LBL, Ms. Add. 4238, fols 70^r–72^r.

¹⁰³ Simon, *Critical History of the Old Testament*, second pagination, 8–14. Hody was well aware of the developing debate between Vossius and Simon, as well as of the earlier history of the interpretation of the *Letter of Aristeas* by sixteenth- and seventeenth-century Christian and also Jewish scholars: see OBL, Ms. Add. A. 77, esp. fols 126–166.

¹⁰⁴ Hody, Contra historiam Aristeae, esp. 219–272.

 $^{^{105}\,}$ The quotation comes from an anonymous 'life and character of Dr Hody': Oxford, Archives of Wadham College, Ms. 10/2/4/3. This is based on 'De vita et scriptis Humphredi Hodii, S.T.P. Dissertatio', in Hody, *De Graecis instauratoribus*, esp. vii–xi.

pronunciation and orthography of Hebrew names to prove that not even the Septuagint version of the Pentateuch represented a coherent work of translation. As a result, Hody undermined even the most limited case for the special authority of the Septuagint, in the process turning erudite attention away from questions of the comparative merits and authenticity of the Greek Old Testament when measured against the Hebrew, and directing it instead towards the process of the composition and editing of the Septuagint as one among many useful biblical translations.¹⁰⁶ This plural model of transmission left little room for Vossius' notion of the wilful corruption of the Hebrew text by later Jews, or for his belief that the Jews of Jerusalem had particularly adopted the Septuagint and its chronology by the time of Christ and of Josephus.¹⁰⁷ Hody, indeed, mercilessly exposed the fallacies shared by a succession of critics who had tried to argue that particular groups of Jews had been thoroughly converted to the use of Greek in their religious worship, and that Christ's words and the writings of the Evangelists must be set against the background of their practice. In the process, he was critical of Scaliger, Cappel, and Simon, but reserved his greatest scorn for Vossius and his teachers, friends, and sympathisers, in particular Saumaise or Bochart. 108

Hody was aware of the reputations that his work would help to ruin. In the index of modern authorities that he compiled for his attack on the *Letter of Aristeas*, Hody established three categories: those whose work was worthy of praise, those who were simply mentioned in his text, and those who were subjected to specific, critical citation. Only four writers (Dodwell, Pococke, Simon, and Vossius) were singled out as being praiseworthy. The four page references that contained (lukewarm or backhanded) praise for Vossius outnumbered the three listed for Simon, about whom Hody was also sharply critical. Yet 'Isaac, the most erudite son of Gerardus' Vossius was at the same time recorded more frequently than anyone else as being the victim of Hody's criticisms (sixteen entries referred to observations on specific places in Vossius' argument, as against a single one for Simon, although in truth almost everything that Hody wrote might be read as an attack on both men).¹⁰⁹

 $^{^{106}\,}$ Hody, De Bibliorum textibus, esp. 201–341; cf. OBL, Ms. Add. A. 81, esp. fols 2–22.

¹⁰⁷ Vossius, De Septuaginta interpretibus, esp. 103–105.

¹⁰⁸ Hody, De Bibliorum textibus, 218–277. Cf. Ros, De studie van het Bijbelgrieksch; De Jonge, De bestudering van het Nieuwe Testament, 29–38.

¹⁰⁹ Hody, *Contra historiam Aristeae*, 56 ('Isaacus, eruditissimus Gerardi filius...'); sigs ²R₃r₋₄v ('Authores recentiores laudati, notati...').

One reason for Hody to tread carefully at first was the extent to which his argument impinged on positions being taken by others at Oxford, who knew Vossius or valued his work. Thus, although Hody praised his close friend, Dodwell, and paid particular homage to Pococke (who celebrated his eightieth birthday in 1684) as 'a man venerable in age and as a miracle of letters, to whom God might add, if he pleases, from my years', he was initially silent about Edward Bernard (with whom he shared a patron, Peter Mews (1619–1706), Bishop of Winchester). 110 Pococke, whose commentary on the book of Hosea was published in 1685, defended the Masoretic text of the Hebrew Bible and sought to reconcile it with the Septuagint. Although the attack on Vossius was more implicit than direct, Pococke's friends and disciples were now massing on one side of the debate.¹¹¹ Their voices were added to those of laymen who were suspicious of the difference between Vossius' work and that of more orthodox critics. The accountant-general in Dublin and moral reformer, James Bonnell (1653-1699), for example commented that Vossius 'has made it appear that they [the Hebrew Old Testament and the Septuagint] agree, where great difference has been apprehended. I find also [tha]t our Mr Dodwell runs down [th]e Rabbins, as having themselvs been imposd upon grossly, & [tha]t nothing of [th]e sort is to be depended on, but from Philo & Josephus...'112

Edward Bernard published an account of ancient weights and measures as an appendix to Pococke's commentary on Hosea. His own notes and marginalia suggest that while he was persuaded by much of what Vossius had to say about Josephus' chronology, he was suspicious of Vossius' narrative of the corruption of the Hebrew text, and thus of his claims for the authority of the Septuagint. The unnamed learned men whom Vossius co-opted for his argument at this point seemed to Bernard to be 'hardly sane'. In 1692, Hody helped to publish an anonymous edition and amended Latin translation of the *Letter of Aristeas*. The preface to

¹¹⁰ Hody, *Contra historiam Aristeae*, 45 (Dodwell), 308 (Pococke): 'venerabilis Vir aetate & miraculo literarum, cui Deus de meis, si placuerit, annis addat.' Hody dedicated this work to Mews' patronage of Bernard, see Smith, *Vita*, 46.

¹¹¹ Pococke, *Commentary on Hosea*, esp., for example, its interpretation of Hosea 11:1–2, where Vossius is mentioned explicitly; cf. Twells, ed., *Theological Works of Pocock* I, 78–79; II, 500–509.

¹¹² Bonnell to John Strype, 15 May 1686 (Cambridge University Library, Ms. Add. 1, no. 56); Bonnell was a close friend of Edward Wetenhall, then Bishop of Cork, who, in 1686, published a study of the relationship between the Old and New Testaments which was implicitly an attack on both Vossius and Simon: *Scripture Authentick, and Faith Certain*.

^{Î13} Vossius, *De Septuaginta interpretibus*, sigs bı^v-2^r (marginal annotations in Edward Bernard's copy of this work, now OBL, shelfmark 4° R 67 Th: 'Vix sani sunt...').

the edition noted that Bernard had urged its publication, owing to the rarity of the original text and translation. It was careful to state that the volume took no position on the controversy that was then raging about the authority of the Letter of Aristeas, remarking only that Josephus had indeed had access to the same text that was now being reprinted. 114 Testimonies to the use of the Letter of Aristeas by ancient Jewish and Christian authors were printed in Greek and Latin, together with the text. Some of these had been collected or translated by Bernard himself, in particular those based on Arabic or Hebrew sources. Among them was the account of the editing of the various versions of the Old Testament in Greek by Origen (the Hexapla), which could be found in the preface to an Arabic Pentateuch among the Laudian manuscripts in the Bodleian Library. Hody later used this evidence to demonstrate that the earliest date for the composition of the *Letter of Aristeas* was 140 years after the time when its protagonists were supposed to have been active. 115 By 1705, the tone that Hody used became more confident, even strident, but in the intervening years he had also carried out much more work of his own on the textual history of the Letter of Aristeas, and on the chronology of the Ptolemaic dynasty. Moreover, by then, Vossius was long dead, and Bernard's interest in him in the 1690s had dwindled to an unsuccessful attempt to secure his manuscripts for Oxford.¹¹⁶

Vossius' Fall from Grace

Vossius' response to the work that Hody had originally undertaken while still a mere Bachelor of Arts strove to be both magisterial and dismissive. In a work dedicated to Charles II, he berated the 'young man from Oxford', in particular suggesting that had he troubled to travel beyond the libraries of Oxford, he would have encountered manuscripts and evidence that would force him to revise his conclusions, in the collections of kings and

¹¹⁴ See *Aristeae historia LXXII interpretum*, sig. $\pi 2^{r-\nu}$. Both the text and its translation are based on Garbitius, ed., *Aristeae, de legis divinae translatione historia*. For Hody's involvement (and his dissatisfaction with the edition), see Hody, *De Bibliorum textibus*, sig. bı^{ν}.

¹¹⁵ Aristeae historia LXXII interpretum, 105–144, esp. 131–140. Cf. Hody, De Bibliorum textibus, 96, and OBL, Ms. Add. A. 77, fol. 183. The manuscript partially edited by Bernard is presumably now OBL, Ms. Laud Or. 258. The texts printed in 1692 were not exhaustive: Thomas Richardson, Master of Peterhouse, Cambridge, from 1699 until his death in 1733, added additional references from other patristic sources to his copy of Vossius, De Septuaginta interpretibus (Cambridge, Peterhouse, Perne Library, shelfmark L.9.42).

¹¹⁶ See, for example, OBL, Ms. Smith 47, fols 56b, 58, 61, 76.

princes who knew the value of Aristeas' testimony. 117 Like his attachment to an English king who was dead by the time this book was published, Vossius' comments seem at this point more elegiac than serious. They mourned the demise of his own career, rather than setting back that of his young competitor for intellectual fame and favour. Hody had no difficulty in obtaining the details that Vossius believed had eluded him, but they changed his opinions and his arguments not one jot. 118

As Edward Bernard realised, Vossius' fate was sealed not by Hody's skill alone. Holy at the end of the 1680s and beginning of the 1690s, a number of young scholars in England, France, and the Netherlands had turned their attention to the critical reading of Greek manuscripts and their subsequent redating. Perhaps the most famous of these was the Cambridge scholar, Richard Bentley (1662–1742), whose low opinion of the value of Vossius' books and manuscripts helped to ensure that his library was not sold to Oxford. Others, such as Bernard de Fontenelle (1657–1757) and Anthonie van Dale (1638–1708), expressed pious scepticism about the history of pagan religions and the origins of the early Christian Church. Van Dale, who was a Mennonite preacher and dean of the civic medical college in Haarlem, in particular attacked the idea that there was anything supernatural involved in pagan oracles and soothsaying. As Jonathan Israel has noted, one of the long-term casualties of van Dale's arguments was belief in the power of Satan to act in the world.

An earlier victim, however, was Isaac Vossius, whose ideas about the Sibylline Oracles van Dale explicitly rejected, and whose defence of the *Letter of Aristeas* he quickly moved to undermine. For Vossius' trust in ancient, pagan and Jewish sources for Christian truth represented just the sort of credulity that most offended van Dale. In particular, he criticised the reliance on the testimony of Josephus which had marked earlier attempts to defend the authenticity of the *Letter of Aristeas*.

¹¹⁷ Vossius, *Observationum ad Pomponium Melam appendix*, 58–72, esp. 65–66: 'Oxoniensis iuvenis'.

¹¹⁸ Hody, De Bibliorum textibus, sigs b1^r-b2^r.

¹¹⁹ Bernard to Thomas Smith, 22 March 1690 (OBL, Ms. Smith 47, fol. 62).

¹²⁰ [Wordsworth], ed., Correspondence of Bentley I, 6–10.

¹²¹ See Fontenelle, *Histoire des oracles*; cf. Van Dale, *De oraculis*; Evers, 'Die "Orakel" von Antonius van Dale'

¹²² Van Dale, *De oraculis*, sig. *4'; 454–510; Van Dale, *Dissertatio super Aristea*; Van Dale to Theodorus Janssonius ab Almeloveen, April 1698 (Leeuwarden, Tresoar, Ms. Hs. 1127, fols 407–408). Cf. Israel, *Radical Enlightenment*, 359–374.

Van Dale's work on the Septuagint was actively encouraged by friends who were in touch with Oxford scholars, particularly Edward Bernard, throughout the 1690s. 123 It thus built directly on what had been achieved by the English critics of Vossius. Although van Dale himself had links with Dutch Collegiants and others who have been associated with a 'radical enlightenment', and although orthodox criticism of his writing on superstition led to delays in the publication of his work on the *Letter of Aristeas*, his principal commitment was to a purified ancient history as well as to a purer form of Christianity. As such, he was happy to receive advice from more orthodox theologians, such as Étienne Morin (1624–1700), professor of oriental languages at the Athenaeum Illustre in Amsterdam, as well as from erudite lay readers. 124

Protestant scholars were not the only writers to express scepticism about Vossius' interpretations of the origins of the Septuagint and the reliability of its chronology. The condemnation of Vossius' writings by the Roman Inquisition did little to prevent their discussion in France in the wake of Simon's publications. There, Vossius appeared to find a staunch ally and defender in the Cistercian theologian and historian, Paul Pezron (1639–1706), who was active at his order's college in Paris. Although Pezron later asserted that 'he had only followed Vossius when he saw Vossius himself following the sentiment of the Fathers', his advocacy of the chronology of the Septuagint and attack on the authenticity of the Hebrew Bible as a record of Scripture at the time of Christ generated, if anything, even greater anxiety among Catholic readers than Vossius' own works had done. 125 Attacked by members of Mabillon's community, particularly Jean Martianay (1647–1717), Pezron was forced to account for his views before the Archbishop of Paris. Martianay conceded that Pezron had performed a service to scholarship by introducing Vossius' works more thoroughly into France, but he nevertheless believed that the defence of the Septuagint chronology represented an implicit attack on the authority of the Vulgate.

¹²³ Above all, his fellow physician, Theodorus Janssonius ab Almeloveen, whose contacts with Dutch publishers helped to ensure the appearance of some of Bernard's works, as well as of van Dale's *Dissertatio*. See Utrecht, Universiteitsbibliotheek, Mss Add. 995 (III–V); Leeuwarden, Tresoar, Ms. Hs. 1127; Stegeman, *Patronage en dienstverlening*.

¹²⁴ Van Dale to Morin, 15 December 1695 (LUB, Ms. Pap. 2); cf. Leeuwarden, Tresoar, Ms. Hs. 1127, fols 303–4, 311–12, 314^{r-v}. On Morin, see Van Miert, *Illuster onderwijs*, 85–89.

¹²⁵ PBnF, Ms. Latin 17939, fol. 204': 'Je n'ay suivi Vossius, que quand je l'ay veu suivre luy-mesme le sentiment des Peres'. Cf. Pezron, *L'Antiquité des tems*. See also Morgan, 'The Abbé Pezron and the Celts'. For evidence that Pezron's work won new converts for the Septuagint chronology in England, see Forbes, Murdin, and Willmoth, eds, *The Correspondence of John Flamsteed* II, 826–828.

If Martianay showed none of the understanding displayed by Mabillon when he read Vossius' works, this was because the intellectual and political climate had changed, not least since the ideas of Vossius were now stirring up trouble among Catholics rather than only between Protestant heretics. In June 1694, Martianay boasted triumphantly:

my business with Father Pezron is finished here. The Archbishop of Paris has \dots ordered him to write no more on the topics of our dispute. His bookseller has gone bankrupt and one can assure him that the last book about the Antiquity of Time contributed greatly to this, having not even sold fifty copies \dots Our people believed me to have been totally floored before I wrote my last book, and they have been embarrassed to see me floor their hero. 126

Within a less than a decade, therefore, both Protestant and Catholic readers had turned decisively against Vossius' arguments concerning the Septuagint. On the whole, they had done so for remarkably similar reasons. Even Martianay was keen, for example, to make sure that no ancient manuscript chronicle in the library of the Vatican or elsewhere supported Pezron's preference for the chronology of the Septuagint.¹²⁷ Demonstration from both antiquarian and philological research showed that Vossius was simply wrong in the claims that he had made for the antiquity, authority, and authorship of the Septuagint. Political and ecclesiastical decisions and shifts in power and jurisdiction both precipitated and later confirmed Vossius' fall from grace. There was little intellectual agreement between Simon, Martianay, and Hody or van Dale, except in their common belief that Vossius was entirely mistaken. What had been a brilliant polemical move in a quarrel over the orthodoxy of critical scholarship and chronology in the 1650s, which had set Vossius up for much of his career as an erudite commentator on the Bible, proved in the cold light of day forty years later to be not much more than a hollow triumph. In part, this remained Vossius' own fault, since he had never delivered the complete consideration of the Septuagint that he had promised. Moreover, in picking a public fight with Simon, he gambled on easily trouncing someone who turned out in fact to be an indefatigable and resourceful opponent, and who

Martianay to Thierry Ruinart, 13 June 1694: 'Mes affaires sont icy finies avec le Pezron, M[on]s[ieu]r de Paris...luy a ordonné de ne plus écrire sur les matieres de nostre contestation. Son libraire a fait banqueroute, et l'on assure que le dernier livre de l'Antiquité de tems, y a beaucoup contribué, n'en ayant pas vendu cinquante exemplaires... Nos gens me croyoient entierement terrassé avant que j'eusse écrit mon dernier livre, et ils ont été confus de me voir terrasser leur heros' (PBnF, Ms. Fonds français 19663, fols 2–23, esp. fols 20–21; see also PBnF, Ms. Latin 17939, fols 196–199). These events followed the publication of Pezron's *Défense de l'antiquité des tems* and Martianay's *Continuation de la défense*.

¹²⁷ Martianay to Ruinart, 17 March 1692 (PBnF, Ms. Fonds français 19663, fol. 13^{r-v}).

happened, unfortunately, to be a more skillful critic. This quarrel ended up exposing both the extreme conclusions and the relative weakness of argument that characterised Vossius' scholarly originality. Skirmishing in pamphlet wars, however successful at the outset, failed in the long run to be a substitute for more serious scholarship. Ownership of manuscripts had not, in the end, meant as much as the ability to assess their contents.

Vossius' Career

It is in this context that it is worth considering what the engagement of Vossius with the Septuagint tells us more broadly about his career. For Jonathan Israel, Vossius was straightforwardly a 'Dutch deist and libertine', who 'elaborated' on 'the tradition of Bible interpretation instituted by Spinoza.'128 This could not be further from the truth. Vossius' reasons for taking a radical approach to the biblical past had very little to do with the contextual criticism of Simon or Spinoza, both of whose ideas he explicitly rejected. 129 Neither the success nor the failure of Vossius' work in biblical criticism was a product of his associations with libertinage, let alone implying a commitment to deism. If Vossius is to be known by his friends, then orthodox English churchmen like Edward Bernard, John Pearson, or Herbert Thorndike, or tolerant and erudite Catholic readers like Jean Mabillon deserve to set the agenda as much as anyone else. One did not have to like Vossius or to deny that his motives were often self-serving to acknowledge the contribution that orthodox critics believed his work and the resources available to him, and to him alone, might make to biblical scholarship. Similarly, Vossius' shortcomings as a scholar, rather than any active subversion of the agenda of the orthodox, were what really sealed his fate. Here, it is important not to judge too harshly, since the scholarly conventions and standards that had contributed to the myth of the youthful brilliance of Isaac Vossius were not the same as those of the end of the seventeenth century. By the close of Vossius' career, far more was known of the Greek manuscript holdings of European libraries and new skills in palaeography and philology were transforming attitudes to the editing and criticism of texts. Even so, it remains remarkable how one puff from a young man from Oxford caused the whole house to fall down.

¹²⁸ Israel, Radical Enlightenment, 451, 449.

¹²⁹ For Vossius' attack on Spinoza, see *Observationum ad Pomponium Melam appendix*, 111–112. The only thing that Vossius said in favour of Spinoza was that his interpretation of the Hebrew Bible was less unlikely in some respects than that of Simon.

IN THE TWILIGHT ZONE: ISAAC VOSSIUS AND THE SCIENTIFIC COMMUNITIES IN FRANCE, ENGLAND AND THE DUTCH REPUBLIC

Eric Jorink*

Introduction

In 1663, the French savant and conseiller du Roy Balthasar de Monconys (ca. 1611-1665) travelled to northern Europe to visit artists and men of learning. Coming from London, where he met members of the recently established Royal Society and saw the airpump designed by Christiaan Huygens (1629–1695), Monconys crossed the North Sea and entered the Dutch Republic by the middle of July. At that time, the Republic was a hub of global trade, science and intellectual debate. Due to its tolerant and liberal climate, the country - a rather loose confederation of provinces, dominated by Holland - attracted businessmen, artists, philosophers and scholars of all denominations from all over Europe, including Jews, millenarians, alchemists and religious sectarians with a strong interest in the pursuit of knowledge.² After Paris and London, Amsterdam was the largest city in Europe. All kinds of information flowed in - or was pulled in - to be debated, absorbed, refined, adapted, stored and codified - either orally, or in books, maps, drawings, engravings, cabinets of curiosities and even paintings.3 The city was Europe's centre of printing and publishing until well into the eighteenth century. Many foreign thinkers settled in the Republic – among them René Descartes (1596–1650), John Locke (1632-1701) and Pierre Bayle (1617-1706). Monconys' journal provides an exciting day-to-day account of the country's bustling intellectual atmosphere in the early 1660s, as do other sources such as the correspondences of Henry Oldenburg (ca. 1618–1677) and Samuel de Sorbière (1615–1670), or the diaries of Christiaan Knorr von Rosenroth (1636–1689)

^{*} I would like to thank Dirk van Miert for his comments on earlier versions of this paper, and Anthony Ossa-Richardson for correcting my English, as well as for his additional suggestions and remarks.

¹ Monconys, Journal des voyages, 73.

² Van der Wall, *Petrus Serrarius*; Israel, *Dutch Republic*; Cook, *Matters of Exchange*; Jorink, *Reading the Book of Nature*.

³ Dupré and Lüthy, eds, Silent Messengers; Jorink and Ramakers, eds, Art and Science.

and Ole Borch (Olaus Borrichius; 1626–1690).⁴ These curious travellers spoke to rabbis, performed chemical experiments, met religious dissenters, witnessed anatomical dissections, and visited painters' and printers' workshops. After a disappointing visit to Vermeer's studio in Delft on 8 August, Monconys was received by the statesman and *virtuoso* Constantijn Huygens (1596–1687), Christiaan's father.⁵ Constantijn showed him recent drawings imported from China and permitted Monconys to peep through his telescope.⁶ A few days later, Monconys travelled to Leiden, where the professor of medicine Johannes van Horne (1621–1670) showed him the famous botanical garden and the anatomical theatre.

Van Horne subsequently took his guest to see Johannes Fredericus Gronovius (1611–1671), the professor of Greek. During their learned conversation an unexpected visitor dropped by: Isaac Vossius. The famous scholar happened to be on his way from Amsterdam to his home in The Hague. Monconys did not hesitate for a moment when Vossius offered him a seat in his coach, even though it would take him back to the city he had just left. The Frenchman was forced 'd'y aller avec lui [Vossius] pour joüir de la conversation de ce docte personage qui, pendant le chemin, me dit fort belles choses'. Back in The Hague, Monconys was entertained by Vossius for three days, and judging from Monconys' account, Vossius was very much taken with him, entertaining him with stories and showing him a variety of curiosities.

From the moment they met, Vossius began a long monologue on the manufacture of lenses and microscopes. During the entire trip from Leiden to The Hague, he spoke of nothing else. Upon arriving at the scholar's house in The Hague, Monconys was immediately shown a single-lens microscope and not, as one might expect, Vossius' famous collection of manuscripts and books. Moreover, Monconys wrote that Vossius 'me donna son livre, *De la cause des vents, et du mouvement de la mer*, qu'il m'expliqua de vive-voix'.⁸ He was also presented with Vossius' book on the interpretation of the Septuagint and his writings on the nature of light. He noticed '6 ou 7 grands livres de tous les simples d'Orient', was instructed on the oscillation of the pendulum, the existence of the vacuum, the pros-

⁴ CHO I, 3-7; 41; Blok, Drie brieven; Fuchs and Breen, 'Aus dem Itinerarium'; OBI I-II.

⁵ On Constantijn Huygens and his interest in the natural sciences see: Bachrach, 'Role of Huygens Family'; Mattey, 'Constantijn Huygens'; Jorink, *Reading the Book of Nature*, 1–31 and *passim*.

⁶ Monconys, Journal des voyages, 145.

⁷ Ibid., 152.

⁸ Ibid., 153-154.

pects offered by the barometer, and the mountains Vossius had observed on the moon by means of a telescope. In short, it was as if Monconys had visited not a renowned philologist and librarian, but an advocate of the New Science, a man like Christiaan Huygens.

Over the very same days that Monconys visited Constantijn Huygens and Isaac Vossius in The Hague, young Christiaan was still in London, moving in the circles of the Royal Society. Eager to find some form of patronage, he wrote to his brother Lodewijk about rumors from Paris that Jean-Baptiste Colbert (1619–1683), the influential mastermind behind Louis XIV's new schemes for absolutist rule, had made plans for a royal pension: 'j'estois sur la liste parmi ces autres beaux esprits'. Colbert, 'the information master', was deliberately building up a massive network of experts in all fields of knowledge. One of the means was a system whereby Louis XIV patronized scholars, both in France and abroad, by a 'gratification', which was subject to renewal each year. Among those hoping to be favoured was, Huygens noted with a certain disdain, 'Vossiolus', 'Mais que cela demeure entre nous'. Indeed, when the French royal pensions were granted a month later, both Vossius and Huygens were among the chosen few, both receiving 1,200 *livres* annually.

In the 1660s, the two scholars' paths would cross repeatedly. They moved in the same intellectual circles in Paris, both attending the *soirées* at the *académie* of Melchisédech Thévenot (1620–1692), one of the informal gatherings of learned men preceding the official establishment of the Académie Royale des Sciences in 1666. Huygens and Vossius were elected Fellows of the Royal Society of London early on; Huygens (presumably) on 22 June 1663 and Vossius just ten months later, on 20 April 1664. The Society's secretary, Henry Oldenburg, held them in high esteem and maintained a correspondence with both of them. From the 1660s until the 1680s, Huygens and Vossius were fascinated by the same scientific

⁹ Ibid., 154. On Vossius' East-Indian herbarium see also *OBI* I, 182.

¹⁰ Christiaan Huygens to Lodewijk Huygens, 10 August 1663, OCCH IV, 390.

¹¹ Soll, The Information Master.

¹² Christiaan Huygens to Lodewijk Huygens, 10 August 1663, OCCH IV, 391.

¹³ Lettres de Chapelain II, 316; OCCH III, 406 n. 9.

¹⁴ OBI III, passim. See also: Brown, Scientific Organisations; Sturdey, Science and Social Status; Stroup, 'Christiaan Huygens'; Dew, Orientalism, 81–130.

¹⁵ Feingold, 'Huygens and the Royal Society'; Birch, *History of the Royal Society* II, 178.

¹⁶ Oldenburg's first letter to Huygens is dated 24 July 1661: *OCCH* III, 310–311; *CHO* I, 411–412. His first known letter to Vossius is dated 6 March 1675, *CHO* XI, 208, although it is clear that their contact started much earlier. Oldenburg was acquainted with their famous fathers as well: his very first known letter is addressed to Gerardus Joannes Vossius, 16

topics, such as nautical problems, optics and astronomical observations. For example, Vossius used Huygens' 'exceptionally good' pendulum clock when observing eclipses.¹⁷ Both owned a copy of Isaac Newton's *Philosophiae Naturalis Principia Mathematica* (1687).¹⁸

However, while Huygens' activities, such as the leading position he initially enjoyed at the Académie Royale, are well-known, Vossius' interest in natural philosophy sunk into oblivion. The reasons for this neglect are far from obscure. Although both men were talented sons of famous Dutchmen, the products of a thorough humanist education, and largely working from the same perspective, Huygens was to become an icon of the Scientific Revolution and the 'mechanisation of the world-picture' on account of his discovery of the rings of Saturn, his mathematical description of the pendulum, and his theory of light.¹⁹ Vossius, on the other hand considered from a positivist point of view - made no lasting contribution to the history of science. Nevertheless, he played an important role in contemporary scientific culture and put forward some interesting and thought provoking ideas. His own theory of the nature of light, as well as his thoughts on the processes governing the tides made much sense – although they turned out not to be correct.²⁰ Given the present interest in humanist culture in the early modern scientific world, Isaac Vossius is a rewarding subject.²¹

In this paper I shall take a tentative look at some of Vossius' intellectual activities in what might be called the twilight zone of his biography, the period between 1658 and 1675. Thanks to the monumental work of Frans Felix Blok, we are extremely well informed on Vossius' life until his farewell to Queen Christina of Sweden in 1658.²² His final years, starting with his emigration to England in 1670, has been described in great detail

August 1641, see *CHO* I, 3–6. Constantijn Huygens started a correspondence with Oldenburg only in February 1674, *CHO* X, 456–458.

¹⁷ Vossius to Van Beuningen, 23 February 1688, LUB, Ms. Hug. 45.

 $^{^{18}}$ OCCH XXII, 816 (+4). Vossius' copy is kept in Leiden ever since the famous purchase of the Vossius collection in 1690, shelfmark 1369 D 19. Given that both Vossius and Newton were Fellows of the Royal Society, this might be an author's copy. There are no indications that Vossius ever read the book. See Jorink and Zuidervaart, 'Newton's Reception in the Low Countries'.

¹⁹ Dijksterhuis, Mechanization of the World Picture; Cohen; Huygens; Yoder, Unrolling

²⁰ Cf. the contributions by Karel Davids and Fokko Jan Dijksterhuis in this volume.

²¹ See for example: Blair, *Jean Bodin*; Grafton, *Defenders of the Text*; Idem, *Worlds made by Words*; Van Miert, *Humanism in an Age of Science*; Dew, *Orientalism*.

²² Blok, Isaac Vossius en zijn Kring; here referred to in the English translation, Vossius and his Circle.

by David Katz.²³ Although Vossius never lost his interest in physics and natural philosophy, after 1670 he partly returned to what is still remembered as his core business: classical philology and biblical scholarship.

Around 1660, he made a remarkable transformation from a librarian, collector of manuscripts and philologist, to that of a self proclaimed *homo* universalis, who consciously put himself in the centre of the scientific arena. Judging from contemporary accounts, he was considered - and obviously considered himself – an exponent of the New Science of the seventeenth century, i.e. of science not only in the limited sense of physics, but in the much broader meaning of the term, which included natural philosophy, natural history, geography and the culture of collecting. For a decade or two, Vossius was compared to (and certainly wished to be compared to) Descartes and Christiaan Huygens.²⁴ But why did Vossius make such a striking career move after he left Queen Christina? What were the social and intellectual contexts of his interest in the New Science? Can we discern an underlying pattern in his ideas on the nature of light, the movement of currents, and the use of the microscope? And can we regard his apparently divergent intellectual activities as a product of the culture that fostered him, that of the Dutch Golden Age?

The Challenge of the New Philosophy

Vossius' attempts to become a *homo universalis* were initiated with the publication of the explosive *De vera aetate mundi* in 1659, discussed by Anthony Grafton and Scott Mandelbrote earlier in this volume. Until then, Vossius had operated in the silent world of libraries, manuscripts and scholarly editions. Now he decided to start a very public racket. He transformed himself from a philologist into a philosopher, from an editor into an oracle. Two observations on *De vera aetate mundi* are of importance here. The first one concerns method. Vossius not only uses philological tools and biblical hermeneutics, but draws on empirical, extra-textual evidence and rationalist reasoning. Earlier, he had employed this method in

 $^{^{23}\,}$ Katz, 'Isaac Vossius and the English Biblical Critics'. For important additions see the articles by Scott Mandelbrote and Thijs Weststeijn in the present volume.

²⁴ For just one of the many examples to illustrate this point see: Oldenburg to Winthrop, 1 March 1669: '....Whether you are furnisht with the modern Books of the most Ingenious and famous Philosophers and Mathematicians, as DesCartes, Gassendus, Riccioli, Hevelius, Cassini, Fabri, Ward, Wallis, Boyle, Pell, Hugenius, Willis, Hook, Merret, Wilkens, Evelyn, Vossius etc?' (*CHO* V, 423).

his classical studies, and now this would become the mould in which his subsequent publications on natural philosophy and geography were cast as well. For example, Vossius calculated that there was simply too little water in the earthly sphere to cover the highest mountain of its surface, as Genesis had it. He pointed out that the story of Noah was just one of the many ancient accounts of a universal deluge. The second observation concerns the form of Vossius' alternative chronology. As Grafton points out, in sharp contrast with earlier works on chronology like Scaliger's *De emendatione temporum* and *Thesaurus temporum*, intimidating in their size and sophistication, Vossius' book was a pamphlet, counting just 55 pages and weighing 78 grams. It was a pocket-sized bludgeon. Pow, Vossius and his work were no longer hidden in the study, but clearly visible and audible in the intellectual arena, both in the Dutch Republic and abroad.

While the debates on the status of the Septuagint would continue for decades to come, Vossius decided to take up a new challenge: natural philosophy. The question is why Vossius deviated from collecting and editing ancient texts, and sought recognition as a natural philosopher in his own right. From the early 1660s on, he was clearly voicing alternative theories for the ancient and contemporary philosophies of nature. It is as if after his troublesome departure from the Swedish queen, Vossius felt the need to re-invent himself. And what offered a more promising perspective than the New Philosophy as advocated by Francis Bacon (1561-1626) and, above all, René Descartes, the Frenchman who lived in the Dutch Republic from 1628 to 1649, and who turned out to be Vosssius' rival in Stockholm? After first taking Joseph Justus Scaliger (1540–1609) and Claude Saumaise (1588–1653) as his models, in the wake of the New Science, Vossius changed direction, taking the self-proclaimed hero of the New Science, Descartes, both idolized and cursed in the Dutch Republic, as his new example.²⁷

²⁵ Vossius, De vera aetate mundi, XIV-XVIII.

²⁶ Jorink, "Horrible and Blasphemous". See also the following comment by Jean Chapelain: 'La querelle de Monsr Vossius avec le Professeur Hornius se rendra aussi célèbre que celle des Préadamites par la curiosité de sa matière et par la réputation des Tenants et de Assailants' (Jean Chapelain to Nicolaas Heinsius, 18 July 1659, Chapelain, Lettres authentiques, 262).

²⁷ Cf. Blok, *Vossius and his Circle*, 323–333. Blok also discusses the contemporary rumours that Descartes was poisoned by 'two Dutchmen' (i.e. Isaac Vossius and Nicolaas Heinsius). See also: Thijssen-Schoute, *Nederlands Cartesianisme*, 608. On Vossius' attitude towards Scaliger and Saumaise see the paper by Dirk van Miert earlier in this volume.

Vossius was well equipped for this self-imposed mission. In his library he kept not only the most obscure ancient manuscripts and editions of Greek and Roman natural philosophers, but all relevant early modern literature, including the most recent works on mathematics, anatomy, astronomy, natural history and geography, including the works by Bacon and Descartes, Simon Stevin (1548–1620), Johannes Kepler (1571–1630), Pierre Gassendi (1592–1655) and Robert Boyle (1627–1691). Vossius possessed all the relevant literature concerning such hotly-debated issues as the Copernican theory and the nature of comets. He owned even the most obscure publications on navigation and the question of finding longitude at sea. Moreover, he had a keen interest in the works of other writers who were influential at that time such as, for instance, Hieronymus Cardanus (1501–1575), Giambattista della Porta (ca. 1535–1615) and Athanasius Kircher (1602–1680).

Although not 'science' in our sense of the term, Vossius' activities of the 1660s were in line with the culture of curiosity of the early Royal Society and of the various informal *académies* active in Paris, such as those hosted by Henri Louis Habert de Montmor (ca. 1601–1679), Melchisédech Thévenot and the infamous Pierre Bourdelot (1610–1685).³¹ The latter were social clubs, with no strict membership, which met on a frequent basis, in contrast to the more formal royal societies in England and France established in 1662 and 1666, which acted in the name of their respective monarchs.³² In the case of the *amateurs, curieux* and *virtuosi* ('liefhebbers' in Dutch), the practice of natural philosophy and experimentation constituted not only a means in itself, but also a way to create a community of discourse and to display erudition, social distinction and status. We may

²⁸ The extremely complex history of Isaac Vossius' library is the subject of Astrid Balsem's forthcoming dissertation. I would like to thank her for the fruitful discussions we have had, and the suggestions she has given me. The following is based partly on the inventory of Vossius' library, made for the occasion of the purchase in 1690 by Leiden University Library: LUB, Ms. BPL 127 AF. Many of the books, bearing Vossius' *ex libris*, can still be consulted.

²⁹ LUB, Ms. BPL 127 AF, fols 320–324. Cf. Vermij, *Calvinist Copernicans*; Jorink, *Reading the Book of Nature*, 157–163.

 $^{^{30}\,}$ LUB, Ms. BPL 127 AF, fol. 316 and passim. Cf. Davids, Zeewezen en wetenschap; De Vries, 'Atlases and Maps'.

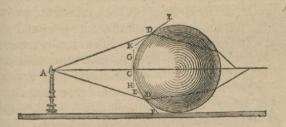
³¹ Cf. Pomian, Collectioneurs, amateurs et curieux; Kenseth, ed., The Age of the Marvelous; Daston and Park, Wonders and the Order of Nature; Smith and Findlen, eds, Marvels and Merchants; Jorink, Reading the Book of Nature; Dew, Orientalism.

³² Cf. Brown, Scientific Organisations; Hunter, Establishing the Royal Society; Boas-Hall, Oldenburg.

DISCOURS SECOND.

25

non que les superficies des cors transparens qui sont courbées, detournent les rayons qui passent par chacun de leurs poins, en mesme sorte que seroient les superficies plattes, qu'on peut imaginer toucher ces cors aux mesmes poins. Comme par exemple, la refraction des rayons AB, AC, AD, qui venans du siambeau A, tombent sur la superficie courbe de la boule de cristal BCD, doit estre considerée en mesme sorte, que si AB tomboit



fur la superficie plate E BF, & AC sur GCH, & AD sur IDK, & ainsi desautres. D'où vous voyés que ces rayons se peuvent assembler, ou escarter diversement, selon qu'ils tombent sur des superficies qui sont courbées diversement. Et il est temps que ie commence à vous descrire, qu'elle est la structure de l'œil, asin de vous pouvoir faire entendre comment les rayons, qui entrent dedans, s'y disposent pour causer le sentiment de la veuë.

D DE

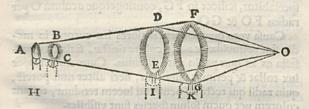
Fig. 1. A page taken from René Descartes, *La dioptrique*, one of the *Essays* following the *Discours de la méthode* (Leiden 1637) (LUB).

PROPRIETATE LUCIS. ducit annulos. Cum nufquam nisi in humido cernan-

tur aëre, utique ex hujus constitutione horum petenda est ratio. Vera esse que scribo vel inde liceat experiri, quod fi vel fimplex aliquod vitrum halitu humectes, & lucernæ à quocunque intervallo opponas, protinus lucerna annulo coronetur. Quod si priusquam halitu oris inficias vitrum aquæ frigidæ immerferis, multo etiamnum coloratiores conspicies coronas.

Sed & è sphæris vitreis quando antliæ pneumaticæ beneficio aër exhauritur, si quis ex opposito sphæræ lucernam tenuerit, illo ipso temporis puncto quo aër in antliam delabitur corona circumcirca lucernam comparebit. Aër enim vi magna decidens & latera vitri toto fuo pondere vehementer adspergens idem quod oris halitus, & quidem efficacius efficit.

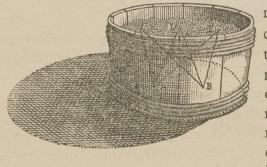
Quod vero nonnunguam duplex adpareat corona, id non alias contingit, quam cum alter oculus imbecillior est altero. Esto lucerna in A oculi vero in O. Si aër non multo humore sit infectus, tunc nullæ quidem



circa lucernas comparent coronæ, aliquanto tamen majores & propiores vifuntur lucernarum flammæ, cum nullus aër tam sit tenuis, ut non aliquam saltem causet refractionem, Flamma itaque A oculo O adparebit in BC.

Fig. 2. A page taken from Isaac Vossius, De lucis natura (The Hague 1662): the lay-out is clearly copied from Descartes' *Dioptrique* (LUB).

par ou le vin doux, qu'elle contient, puille couler. Puis pensés que n'y ayant point de vuide en la Nature, ainsy que présque tous les Philosophes auouënt, & neantmoins y ayant plusieurs pores en tous



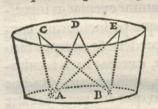
lescorps que nous aperceuons au tour de nous, ainfy que l'experience peut moîtrer fort clairement; il est neces-

faire que ces pores soyent remplis de quelque matiere fort subtile & sort sluide, qui s'estende sans interruption depuis les Astres insques à nous. Or ceste matiere subtile estant comparée auec le vin de ceste cuuc,

Fig. 3. Fragment of a page of Descartes' *La dioptrique*, on the corporeal nature of light (LUB).

error palam siat & simul veritas elucescat. Omnium opiniones recensere nihil hic adtinet, abunde id præstitere alii: Sussiciat de opinione Cartesii, quæ maxime recepta est hoc seculo, pauca dicere.

Duas is proponit similitudines, quibus motum luminis per corpora explicare conatus est. Prior hæc est.



In lacu calcatis uvis pleno, infra vero in A&B perforato, dicit particulas vini quæ hærent circa C, eodem momento simulac foramen A patuerit, recta descensum ad illud affectare & simul ad foramen B. Mox sub-

dit, eodemque tempore que circa D & E per hecip/a foramina descendere properant; ita tamen ut nulla harum actionum alteram impediat, & ne ipsi quidem ramusculi immixtorum seaporum resistant.

Sed crassus hic profecto est error. Nullum enim corpus sive sluidum, sive solidum, sive ex utroque mixtum in tali situ diversis locis premere potest. Puncta inferiora ab iis tantum punctis premuntur quæ perpendicula-

Fig. 4. Fragment of a page of Vossius, *De lucis natura*, explicitly rejecting Descartes and arguing for the existence of the vacuum (LUB).

consider Vossius' scientific enterprises as an effort to become a *curieux*, that is, as a means to acquire a new identity, to create a new audience.

Vossius' fascination for – and dislike of – Descartes is manifest already in his *Observationes ad Pomponium Melam de situ orbis* (1658).³³ Samuel de Sorbière, visiting in 1660, noted that Vossius could not only gossip enjoyably about Descartes, but was also working on a 'traité de la lumière'.³⁴ Indeed, in 1662 *De lucis natura et proprietate* appeared, a book in which Vossius explicitly rejected the Cartesian idea of the corpuscular nature of light, starting from page one.³⁵ Not only was the book's content obviously composed with the Cartesians in mind, but the form as well. Size, layout and, above all, the lavish use of schemata, graphics and illustrations (all integrated in the text), are clearly copied from *La dioptrique*, one of the *Essais* that followed Descartes' *Discours de la method*. Vossius, who until this time had shown little to no interest in the visual presentation of his publications, certainly was inspired by the visual impact of Descartes' 'clear and distinct' images (figs 1–4).³⁶

The *De lucis natura* was Vossius' first clear attempt to be recognized as a natural philosopher. Inspired by others' recent experiments with the airpump, and contrary to what both Aristotelians and Cartesians maintained, Vossius claimed that the vacuum in fact *did* exist – and that light was able to move through it.³⁷ This was a daring standpoint, to say the least.³⁸ Moreover, to add insult to injury, Vossius plainly stated that both light and its cause, fire, were immaterial – they did *not* exist as particles or matter-in-motion.³⁹ Vossius' entry on the stage of natural philosophy aroused much controversy, especially in the Dutch Republic where Cartesian physics had become the new orthodoxy among many natural philosophers and physicians.⁴⁰ Dutch Cartesians rejected *De lucis natura*.⁴¹

 $^{^{33}}$ Vossius, $Observationes\ ad\ Pomponium\ Melam,\ 94;\ cf.$ the contribution by Karel Davids elsewhere in this volume.

³⁴ Blok, Drie brieven, 73.

³⁵ See the contribution by Fokko Jan Dijksterhuis elsewhere in this volume.

³⁶ Lüthy, 'Descartes' Clear and Distinct Images'; Jorink, 'Geef zicht aan de blinden'.

³⁷ Vossius, De natura lucis, 15–28.

 $^{^{38}}$ For the debate on the vacuum see: Grant, *Much Ado about Nothing*; Shapin and Schaffer, *Leviathan and the Airpump*.

 $^{^{39}}$ 'Causa et subjectis luminis est ignis.... Ignem non esse corpus' (Vossius, *De natura lucis*, 1–2).

⁴⁰ Israel, *Dutch Republic*; Verbeek, *Descartes and the Dutch*; Van Ruler, *Crisis of Causality*; Van Bunge, *From Stevin to Spinoza*.

⁴¹ See for example: De Bruyn, *Epistola ad clariss. virum Isaacum Vossium*; Vossius, *Responsum ad objecta*, 4. Cf. Thijssen-Schoute, *Nederlands Cartesianisme*, 612.

In France, the influential man of letters Jean Chapelain (1595–1674), the agent of Jean-Baptiste Colbert and Louis XIV in the world of learning, remarked:

C'est un fort brusque Physicien et lui donne bien à ses fantaisies. Il n'est pas ici dans l'approbation des gens du métier ni Démocritiens ni Cartesiens ni Aristotéliens, et je ne crois pas que les Anglais ni les Italiens lui applaudissent.42

However, Vossius was not impressed by remarks like these, and the science of optics as well as microscopic and telescopic observations remained his pet subject for more than a decade. In 1663 Vossius owned the singlelens microscope which he showed to Monconys, an instrument which was at that time still rather exceptional.⁴³ The device was produced by Johannes Hudde (1628-1704), a brilliant mathematician and a friend of Christiaan Huvgens, and later burgomaster of Amsterdam and governor of the Dutch East India Company (VOC).⁴⁴ In the 1650s, Hudde had speculated on the theoretical problems of lens production. By now, he followed a more practical approach, manufacturing single-lens microscopes with beads of melted glass. He generously shared his knowledge - and microscopes – with friends and acquaintances such as Johannes Swammerdam (1637-1680), Benedictus Spinoza (1632-1676) and Vossius. Vossius was fascinated. In 1666 a friend begged him for information on a particular book on insects, presumably Robert Hooke's revolutionary Micrographia (1664).⁴⁵ Vossius was very well informed. The Florentine scholar Lorenzo Magalotti (1637–1713), secretary of the Accademia del Cimento, visited him in 1667 and subsequently wrote to Francesco Redi (1626-1697) that Vossius was eagerly awaiting the publication of Redi's work on insects, the impressive Esperienze intorno alla generazione degl'insetti (1668).⁴⁶ Around 1668, Vossius wrote 'a little Latin treatise on glass drops' but there

⁴² Chapelain to N. Heinsius, 26 July 1662, Chapelain, Lettres authentiques, 364.

Ruestow, *The Microscope*, 6–35; Jorink, 'Beyond the Lines of Apelles'.
 De Waard, 'Hudde'; Vermij, 'Bijdragen'; Vermij and Atzema, 'Specilla circularia'.

⁴⁵ Colvius to Vossius, July 1666: 'Retulit mihi D. van der Meer, te habere librum de insectis in Anglia impressum, cujus nomen scire desidero' (OBL, Ms. d'Orville, 470 fol. 79'). For Vossius' fascination with Hooke's Micrographia see: Vossius, De Nili origine, 114. Vossius obviously had easy access to Hooke: Huygens to Auzout, 17 September 1665, OCCH V, 482–483. That Vossius was on friendly terms with Hooke is confirmed by the Diary of Robert Hooke, 151, 152, 353-357. On the impact of Hooke's work see: Wilson, Invisible World, 182 and passim; Fournier, Fabric of Life; Harwood, 'Rhetoric and Graphic in Micrographia'; Jorink, 'Beyond the Lines of Apelles'.

⁴⁶ Magalotti to Redi, 17 December 1667, Florence, Bibliotheca Medicea-Laurenziana, Ms. Fondo Redi, 206 fols 55^r-56^v.

is unfortunately no trace of it today.⁴⁷ He also owned a copy of Swammerdam's pioneering *Historia insectorum generalis*.⁴⁸

Vossius was not fascinated by the world of the microscope alone. According to Christiaan Huygens in 1665, he was in possession of a telescope nearly 30 feet long. Like many contemporaries, he was an active comet-hunter, who both observed and speculated on the nature of these heavenly phenomena – in staunch anti-Cartesian fashion, to be sure. Many related themes were the subject of his curiosity, including the craters of the moon, and the burning mirrors by which Archimedes was supposed to have destroyed the Roman fleet near Syracuse.

Vossius made other claims to fame in the 1660s as well. In 1663, he published a highly original book on the causes of the winds and tides, *De motu marium et ventorum liber*, which was translated into English in 1677 as *A Treatise Concerning the Motion of the Seas and Winds*. And in 1666, Vossius published another book on geography, *De Nili et aliorum fluminum origine*. Both books are discussed by Karel Davids in the present volume, but it is worth noting here that in these works, Vossius, once again, rejected Cartesian explanations.

Vossius and the Order of Nature

A few tentative remarks may be made on Vossius' method. At first sight it might seem that his works on the nature of light, the tides and winds, and the origin of the Nile are the speculations of a dilettante, jealous of Descartes' fame. In well-chosen words Vossius ridiculed Descartes' theory that the whole universe, and every phenomenon and creature in it, consisted only of tiny particles colliding with each other. Vossius' commentary on Pomponius Mela, as well as his *De natura lucis*, *De motu marium* and *De Nili origine* are implicitly and sometimes explicitly directed against the

⁴⁷ Justel to Oldenburg, 18 November 1668, CHO V, 179.

 $^{^{48}}$ Swammerdam, $\it Historia$ insectorum generalis. Vossius' copy is still in LUB, shelfmark 532 F 41 (no manuscript notes).

⁴⁹ Huygens to Hudde, 7 September 1665, OCCH V, 391–395.

⁵⁰ Vossius, *De natura lucis*, 79–85; Vossius, 'Appendix de natura lucis', 135–145. Vossius' theory was rejected by Christiaan Huygens: Huygens to Heinsius, 13 October 1661, *OCCH* III, 364. Vossius obviously had a reputation for being interested in comets. Pierre Petit sent Vossius his *Dissertation sur la nature des comètes* (Paris 1665); Petit to Christiaan Huygens, 23 January 1665, *OCCH* V, 206–208. Johannes Graevius sent Vossius a copy of his *Oratio de cometis* (Utrecht 1665) as well: Graevius to Isaac Vossius, March 1665, OBL, Ms. D'Orville 470 fols 57–59.

detailed and far-fetched materialist speculations of Descartes. But if we more closely examine the underlying principles or unifying forces in these works, he has more in common with Descartes than his bitter rhetoric would suggest.

It is clear that Vossius based his speculations on a profound reading of both classical and contemporary books and sources – all at his disposal in his library. He explicitly valued sense perception, as well as common sense. Contrary to his father Gerardus Joannes, who had maintained that all scientia essentially lay buried in the writings of antiquity, including the Bible, Isaac was much more sceptical, to say the least.⁵¹ 'We live in a century', he wrote in the context of his work with the microscope, 'wherein even the senses of fools may gather in more than the senses of all the wise men of Greece did'. 52 This is an interesting point of view, repeated throughout his *oeuvre*. Contrary to traditional humanist ideas about the prisca scientia, and to the practice of natural philosophers working in the tradition of scholastic Aristotelianism, Vossius was an eclectic who, although very well versed in ancient sources, did not consider them as authoritative per se. Some ancient texts contained useful information, others not, but in both cases one had to study the extant copies from the viewpoint of the philologist: to check them against other sources, both contemporary and later. In either case, the text had to be studied both by contextualizing it historically and linguistically, as well as by comparing its contents with the knowledge gained from post-classical and contemporary sources - and by applying a rationalistic frame of mind, as well as common sense.⁵³ Vossius' inclination to observation, empiricism and calculation fitted well with contemporary developments in natural philosophy as well as in philology.⁵⁴

Vossius certainly was no Cartesian, but his scepticism regarding the value of bookish knowledge and his inclination to critical reasoning has some features in common with the epistemology of the *Discours de la méthode*, where Descartes had written:

⁵¹ Cf. Rademaker, Vossius; Wickenden, Vossius and the Humanist Concept of History.

⁵² 'Eo vivimus seculo, quo etiam stultorum sensus latius pateant, quam patuere olim sensus omnium Graeciae sapientium' (Vossius, *De Nili origine*, 102).

 $^{^{53}}$ See also the remarks by Dirk van Miert (28, 31, 40), Anthony Grafton (67–69, 71–74) and Scott Mandelbrote (92–93, 110) on Vossius' philological methods, earlier in this volume.

⁵⁴ Cf. Grafton, Defenders of the Text; Van Miert, ed., Communicating Observations in Early Modern Letters.

DE NILIET ALIORUM

In fistula itaque A humor attollitur usque ad B. Eadem incurvata quemadmodum in a, admittet humorem usque in \beta: Similiter in fistula C humor surgit ad D, eadem inclinata in \beta, recipiet humorem usque ad \beta. Ea autem lege in istis fistulis, sive rectæ sint, sive inclinatæ, surgit humor, ut B & \beta, & similiter D & \delta aqualiter supra horizontem attollantur. Quod si siat vas instar cornu, cui insundatur aqua, quæ in crure latiore attollatur ad O, jam in altero strictiore crure elevabitur ad V, aut etiam altiùs, si angustior suerit cervix.

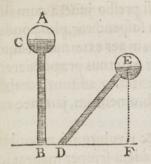
Quæ vero hic notanda sunt imprimis sunt ista.

I. Nempe qualis est proportio canalis C ad A, eadem quoque est proportio altitudinis AB ad altitudinem CD, & contra qualis est altitudo CD ad altitudinem AB, talis est etiam ratio foraminis A ad foramen C.

II. Quan-

Figs 5 and 6. In *De Nili origine* (The Hague 1666), Vossius not only included maps, but also referred to experiments and calculations, and made use of the visual language of the New Science (LUB).

FLUMINUM ORIGINE.



vel plurium pedum. Hoc si sit, jam aqua in trigesimo primo circiter pede hærebit suspensa, nempe in C, cum æquale esse debeat pondus aëris foras prementis osculum B, & humoris in sistula seu ampulla dicto orisicio incumbentis. Fiet

itaque æquilibrium, nec aqua effluere poterit. Inclinetur dein eadem fistula & eadem aqua ut in DE, quia minor est altitudo perpendicularis EF altitudine humoris CB, erit ut CB ad EF, ita quoque fiet pondus humoris CB ad ED. Præponderabit igitur aër orificium ampullæ premens in D, & fursum attollet aquam DE, quæ relabens aërem relinquet in spatio prius vacuo, in E nempe. Cum vero propter motum concitatum copiosius affluat aër quam æquilibrio sufficiat, necessario premet aquam & faciet illam effluere, & quidem eousque, donec aër in E ampliorem nactus locum eatenus solum premat, ut hujus pressio, juncta cum pondere aquæ residuæ in ampulla suspensæ, æquilibrium constituat cum pondere aëris externi. Hoc si accidat jam iterum aqua immota harebit, nec effluet nisi iterum inclinetur ampulla & plus aëris admittatur: semperque

B₃ con-

...je pensay que les sciences des livres, au moins celles dont les raisons ne sont que probables, & qui n'ont aucunes demonstrations, s'estant composées & grossies peu a peu des opinions de plusieurs diverses personnes, ne sont point si approchantes de la verité, que les simples raisonnemens que peut faire naturellement un homme de bon sens touchant les choses qui se presentent.⁵⁵

This brings us to Descartes himself. As is well known, at the court of Christina, Vossius the librarian and Descartes the philosopher were at odds. If we leave their antagonism aside and take a fresh look at the contents of Vossius' works, some interesting similarities arise. They shared a sceptical attitude towards the ancients, and this included the status of the received text of the Bible in physical and philosophical matters. Although Descartes never made his scepticism on this front explicit, Vossius elaborated upon the subject both in his De vera aetate mundi and in later works. Both used philosophical reasoning and a quantitative analysis – as Vossius' books as well as notes on chronology, the universality of the Flood, the refraction of light or the origin of the Nile show.⁵⁶ Moreover, both considered nature not as sum of entities and processes guided by Aristotelian accidentalism and teleology nor by Epicurean chance, but as the result of a deeper, unifying rule or law. It was Descartes who first introduced the concept of the 'law of nature' in the modern sense of the term, implying that the researcher should try to find the underlying principles of creation, instead of focusing on nature's particulars or hidden meanings, as the Aristotelian scholastics advocated.57

Descartes' epistemology was translated into his mechanistic world picture, in which everything in nature was reduced to matter-in-motion. According to Descartes, the cosmos was much like a giant clockwork, and physical phenomena could only be fully understood when explained by the reciprocal influence of bodies acting upon each other.⁵⁸ For example, Descartes conceived of light as the movement of small *corpuscula* in the sea of imperceptible small particles that filled the universe. Vossius' theory of light, which presupposed the existence of the vacuum and stressed the incorporeality of light, contradicted Descartes' – and obviously was meant

⁵⁵ AT VI, 12–13.

⁵⁶ On Vossius' chronological calculations and re-calculations in his manuscripts-notes and comments in the margins on works of other authors see the contributions by Susan Derksen elsewhere in this volume.

 $^{^{57}}$ The best analysis is – alas – in Dutch: Vermij, 'Wetten der natuur'. See also: Ruby, 'Origin of Scientific "Law" '.

⁵⁸ Van Ruler, Crisis of Causality, 234.

to do so, as the Frenchman's disciples did not fail to point out.⁵⁹ But there was a more fundamental agreement between the two: they shared the basis conviction that, in principle, *all* the processes in the universe could be explained in a rational way, as they obeyed the same laws of nature. The basic *a priori* was the same: nature is coherent and not contingent – but Descartes kept being lured by the challenge of finding a specific explanation for every single phenomenon. Time and again, Vossius was explicit in his rejection of speculative ideas such as occult forces, hidden properties, actio-in-distans and the Cartesian swirling vortices or specific forms of the particles involved. Nature was stable and uniform, Vossius insisted time and again. For example, as Susan Derksen describes elsewhere in this volume, Vossius noted in the margin of his copy of La Peyrère's Praeadamitae: 'God does not do anything outside the order of nature'.60 In the mid-seventeenth century, this was by no means an accepted axiom. On the contrary, in the wake of a new mechanistic view of nature, concepts like chance, contingency, spontaneous generation, 'plastic nature' and occasionalism gained new currency, not to speak of the continuing tradition of thinking in terms of occult, praeternatural and supernatural forces. One of the interesting, although seldom recognized features of Vossius' speculations on nature is his willingness (or even eagerness) to reduce seemingly contradictory phenomena and observations to one underlying cause. Over the years, he developed a certain pleasure in contradicting received opinion. As he wrote in the dedication of his *De motu marium* to the States of Holland and West-Friesland:

I am not ignorant that in this age as well as in all others, there are many that will condemn an endeavor to explain the Seas and Winds, as a rash and vain attempt, seeing they take it for certain that most of the motions that are observed in the Air and the Waters are uncertain, fickle and tyed to no constant rules.⁶¹

In the same optimistic spirit as Descartes, Vossius was completely convinced that for every phenomenon or process in nature, there was a rational explanation. If only 'lovers of Truth' would be willing

to acknowledge that there is a noble and constant order of nature, which suffers nothing to happen by chance or fortune; and that she [nature] being

 $^{^{59}\,}$ See the contribution by Fokko Jan Dijksterhuis in this volume. Cf. also Dijksterhuis, Lenses and Waves.

⁶⁰ See the contribution by Susan Derksen, below, p. 273, n. 64.

 $^{^{61}}$ Here quoted after Vossius, $\it Treatise$ concerning the motion of the seas, 'The Epistle dedicatory'.

138 ERIC JORINK

the Lady and mistress of things is not so unadvised as to do anything rashly, but that she does rather so faithfully execute the laws prescribed by the creator to everything, that if at any time she seems to deviate, it is not nature her self, but our opinion and judgement of her that ought to be blamed. 62

The most interesting aspect of *De motu marium* is that Vossius tried to develop an over-arching theory to explain natural phenomena which at first sight were not related, namely winds, currents and tides. According to Vossius, the processes were related and had their root in a single cause: the heat of the sun. The point is not whether Vossius was right or not, but that he tried to identify only *one* underlying natural cause.⁶³ In this sense (and only in *this* sense), he was *plus Cartesien que Descartes*, who in theory claimed to reduce all processes in nature to one fixed law, but in practice had to frame the most ingenious schemes in order to explain all contradictory phenomena observed. Vossius' concept of nature comes close to that of, for example, Johannes Swammerdam or Spinoza who both vehemently rejected contingency and chance.⁶⁴ Unlike those, however, Vossius did not speculate very much on the nature of God or His role in creation.

If a label should be attached to Vossius at all, we may call him an eclectic, who borrowed concepts from natural philosophy and used the tools of classical scholarship and philology, and at the same time had an open mind towards empirical data and contemporary philosophical concepts. He made observations himself, with various instruments, such as the microscope, the telescope and, as early as 1644, with an instrument he seems to have developed himself: the 'aeroscopium' – presumably a kind of barometer not unlike the instrument constructed by Evangelista Torricelli (1608–1647) some years earlier. In a rather sophisticated way, he tried to fit observations and empirical data into a theoretical framework, and made the theory explain the phenomena observed. He kept measuring, counting and calculating – regardless the object of study, be it ancient calendars, degrees of refraction of light, or distances at sea. That

⁶² Ibid.

⁶³ Cf. Burstyn, 'Theories of Winds and Ocean Currents'.

⁶⁴ Cf. Jorink, "Outside God, there is Nothing".

⁶⁵ On hearing via Magalotti of the barometric experiments carried out at the Florentine court (by Torricelli), Melchisedech Thévenot asked Vossius: '... avez vous observé quelque chose semblable dans vostre Aeroscopium?' (Thévenot to Vossius, 22 April 1644, LUB, Ms. Bur. F 11-II, fol. 267^r. For more references to Vossius' instrument see Vossius, *De motu marium, passim.* On Descartes and Torricelli's invention, see Bos and Verbeek, 'Conceiving the Invisible'.

his theories often proved incorrect, should not obscure the fact that his effort was daring, and that, for a decade or two, leading intellectuals in the Dutch Republic, France and England took him quite seriously. Abroad, Vossius' outspoken anti-Cartesianism landed in fertile soil, especially in France where Descartes' philosophy of nature was not widely accepted before the end of the 166os. 66 One wonders if Vossius' exercises in the natural sciences were specifically directed at the French intellectual market, as an alternative to Descartes' contentious materialistic philosophy.

Vossius, Courtier?

Initially, Vossius was rather successful in creating an audience for his unorthodox exercises in natural philosophy, natural history and geography. Although he hinted more than once at the existence of an intellectual underworld, whose members swore oaths to destroy his reputation, Vossius gained recognition among his peers.⁶⁷ Many sources testify that he was a charming and erudite host, always willing to share his ideas.⁶⁸ In his books he showed the polemical side of his scholarship. In this respect, he much resembled his former tutor and onetime friend Claude Saumaise, allegedly amiable in person, but murderous on paper.⁶⁹

To be sure, the French connection remained rather important to Vossius. As early as 1643, he had made the acquaintance of the French diplomat, bibliophile and *curieux* Melchisédech Thévenot.⁷⁰ Thévenot remains a rather mysterious figure, even though he played an important role in the Republic of Letters.⁷¹ As the uncle of the traveler Jean de Thévenot (1633–1667), he came from an influential family of independent means, and had ample opportunity to devote himself to the world of learning. Vossius and Thévenot shared an interest in geography and travel accounts, and had for years exchanged books, manuscripts and information. Chapelain

⁶⁶ Clarke, Occult Powers and Hypotheses; Jolley, 'Reception'.

⁶⁷ See for example: Vossius, *De vera aetate mundi*, XV; Vossius, *De motu marium*, 'Ad lectorem'

⁶⁸ See for example, Monconys, *Journal des voyages*, 152–154; *OBI* I, 108, 115, 146–148, 182.

⁶⁹ Otterspeer, *Leidse universiteit* I, 336. On Vossius and Saumaise see Blok, *Vossius*, passim; Ter Horst, *Vossius en Salmasius* and the contribution by Dirk van Miert earlier in this volume, esp. 17.

⁷⁰ Blok, Vossius, 169.

⁷¹ Thévenot deserves more research; by far the best analysis of his life and works available is Dew, *Orientalism* 81–130 and *passim*. See also: Nordström, 'Swammerdamiana'; McKeon, 'Une lettre'; McGlaughlin, 'Une lettre de Melchisédech Thévenot'; Schiller and Théodoridès, 'Sténon'; Turner, 'Bubble Level'.

noted of Vossius: 'Son [livre sur] Mela a eu un grand success parmi nous. M. Thévenot en est le Paranymphe'. 72 Like his friend Vossius, Thévenot was fascinated by scientia in the broadest sense of the term. He was a polyglot (mastering Hebrew, Greek, Arabic and Dutch), he invented the bubble level, and he published a book on the art of swimming. One of Thévenot's best known projects is the series *Rélations de divers voyages* curieux, which started in 1663 and included French translations of the travel reports from the East, both old and new. The explicit aim was to foster French interest in long distance trade and to facilitate navigation. As Thévenot explicitly stated in his dedication to Louis XIV in the second volume (1664): it is reserved for the French king to make the whole human race richer and more knowledgeable and better informed of all the advantages that men can draw from both the Arts and from Nature. 73 The somewhat inconsistent series would appear between 1663 and 1672 (with a reworked new edition in 1681, including a 'Disours sur l'art de navigation', as well as work by Swammerdam),⁷⁴ it included 55 extracts and translations of travel accounts. Thevenot had exceptionally good relations with the cosmopolitan Dutch Republic. Christiaan Huvgens and, after his appointment to the Académie Royale des Sciences in 1666, Swammerdam, acted as go-betweens, sending books, observations, instruments and gossip to Thévenot. 75 For the benefit of the *Relations*-series, Christiaan Huvgens provided Thévenot with François Caron's famous description of Japan. 76 Also included was an extract of Joan Nieuhof's as-yet unpublished account of the Dutch Embassy to China of 1656–1657, including some of the spectacular images. 77 Vossius provided Thévenot with the text by the sixth-century traveler to India, Cosmas Indicopleustes, 'Description des Plantes & des

 $^{^{72}}$ Chapelain to Heinsius, 13 May 1659, Chapelain, *Lettres authentiques*, 258. A paranimph is a person, usually a close friend, who accompanies someone who presents his thesis.

⁷³ Thévenot, Relations de divers voyages curieux II, 'Au Roy'.

⁷⁴ Thévenot, *Recueil de voyages*. The only known copy in the Netherlands is in LUB, shelfmark 1365 H 6, from the library of Isaac Vossius

⁷⁵ OCCH III, 279. See also: OCCH III, 287, 324, 339; Lindeboom, Letters.

⁷⁶ François Caron (1600–1673) lived for twenty years in Japan, with a Japanese wife. In 1648 the first edition appeared of his highly influential *Beschrijvinghe van het Maghtig Coninckrijck Japon*. Christiaan Huygens to Lodewijk Huygens, 7 December 1661, *OCCH* III, 395.

⁷⁷ Extrait de la Relation de l'Ambassade que les Hollandois envoyerent en 1656 & 1657 au tartare qui est presentement Maistre de la Chine, traduit d'un Manuscrit Hollandais', in: Thévenot, *Relations de diverses voyages curieux* I (separate pagination). The first edition of the Dutch version, Nieuhof, *Het Gezantschap der Nederlantsche Oost-Indische Compagnie* was published in 1665. See: Van Meersbergen, 'De uitgeversstrategie van Jacob van Meurs belicht'.

Animaux des Indes Orientales... tiré d'un Manuscrit de la Bibliotheque de S. Laurens de Florence', which was included in the first volume of the *Relation*. One of Thévenot's life-long projects was a Latin translation and edition of the *Geography* of Abulfeda (Ismail ibn Ali, 1273–1331), who had given a highly valued description of unknown parts of Asia, including the latitudes and longitudes of the most important cities. Although Thévenot devoted many years to the project and begged Colbert for financial assistance for the publication, a printed edition never saw the light. One of the publication, a printed edition never saw the light.

Thévenot played an active role in the flourishing world of the académies in Paris. In the 1650s and early 1660s he moved in the circles of Pierre Gassendi and Henri Louis Habert de Montmor and, after the guarrelsome end of the latter's group, started his own informal académie, which was active from June 1664 to March 1666.80 Much in the Baconian spirit of the recently established Royal Society (but without royal charter or formal membership), a circle of natural philosophers, philosophers, physicians and curieux, such as Pierre Borel (ca. 1620–1671), Adrien Auzout (1622– 1691) and Pierre Petit (ca. 1594–1677), met weekly. At Thévenot's house in Paris they performed experiments and discussed books, as well as the latest issues of the recently established *Philosophical Transactions of the* Royal Society in London. One aim of the group seems to have been 'de travailler à la perfection des Sciences et des Arts, et de rechercher generalement tout ce qui peut apporter de l'utilité ou de la commodité au Genre humain et particulièrement à la France'.81 The Thévenot-group was often joined by visiting scholars such as Constantijn and Christiaan Huygens, the diplomat and mystic Coenraad van Beuningen (1622–1693), Johannes Swammerdam and Nicolaus Steno (1636-1689).82 According to the diarynotes of the Danish professor Ole Borch and other sources, Vossius, who at that time lived more or less permanently in Paris, frequently attended these conferences, and was one of its regular speakers.⁸³ He was often the first to deliver a talk, e.g. on methods of determining the height of

⁷⁸ Thévenot, *Relations de divers voyages curieux* I (separate pagination); cf. Thévenot to Christiaan Huygens, 25 September 1661, *OCCH* III, 347.

⁷⁹ McGlaughlin, 'Une lettre de Melchisédech Thévenot'. For a discussion of the project see Dew, *Orientalism*, 107–130.

⁸⁰ See, among others, OCCH V, 41 and passim; OBI IV, passim; McKeon, 'Une lettre'.

⁸¹ This is based on the anonymous draft 'Project de la Compagnie des Sciences et des Arts', which is attributed to Thévenot, and can be found in *OCCH* IV, 325–329. See: Dew, *Orientalism*, 93–94.

 $^{^{82}}$ From a letter from Van Beuningen to Vossius, 26 August 1667, LUB, Ms. Bur. F 11-II, fol. 48°, it can be deduced that Vossius and Van Beuningen shared an apartment in Paris. 83 *OBI* IV, 30, 40, 61, 62, 89, 90, 156, 173, 317. See also *OCCH* V, *passim*.

142

mountains, the swing of pendulum clocks, the air pressure in Africa, and the size of the mountains on the moon.⁸⁴

Clearly, Vossius belonged to the world of the French *curieux* and their English counterpart, the virtuosi. Given that Vossius since 1663 enjoyed the annual royal pension from Louis XIV, one may also wonder if he had the ambition to be or to become a courtier, as he had been at Oueen Christina's court.85 As Karel Davids and Astrid Balsem show elsewhere in this volume, Vossius was not exactly destitute, nor was he a man of independent means. He was neither a Spinoza, who could manage on just 300 guilders a year, nor a Leibniz, who boasted that a philosopher of his stature needed at least 3,300.86 The annual 1,200 livres Vossius received from the French crown were warmly welcomed, although it was not an unconditional gift. As Jacob Soll notes, in these years Colbert started to build an impressive state-controlled intelligence system. One of his aims was the acquisition of practical scientific knowledge in the fields of astronomy, botany, medicine and, of course, geography, which could serve la raison d'étât. Jean Chapelain, Soll writes, 'became Colbert's agent, searching for scholars, both French and foreign, willing to take Colbert's money in return for royal service, and possibly propaganda'.87 Chapelain's

⁸⁴ See for example the notes of Borch of the meeting that took place at 25 September 1664: 'Conventui Academico interfui apud Dn. Thevenot, ubi Dn. Petit, Auzotius, Is: Vossius, Momord etc: ibi 1. Narravit D. Vossius se pendulo per aquam in minutum globum illapso idem efficere quod alia pendula efficiunt, et tam praecise; observavitque cum veteribus hydraulices authoribus, aquam eandem in eadem clepsydra hyeme tam cito conficere et absolvere horas 11, quam aestate decem, (an plus vaporum in aere hyeme, quibus efficacius premitur aer? Hinc aqua marina levissima judicatur, et minimus ventus ciet horribiles fluctus). 2. Dn. Petit, ut diaphanorum omnium refractiones ostenderet, conos ex vitro, succino, sale, talco, etc: effecerat, eosque per machinam lineis notatam inspiciebat, notans loca ubi refractiones singulorum terminabantur, hinc talem etiam conum ex vitro cavo confecerat, cuj jam sp[iritus] vini jam aquam, jam aquam fortem, etc: immittebat, notabatque inspiciendo per duplex foramen refractionem singulorum' (*OBI* IV, 40).

⁸⁵ Blok, *Vossius and his Circle*, 249–346; Cf. Biagioli, *Galileo, Courtier*; Moran, ed., *Patronage and Institutions*.

⁸⁶ See the brilliant analysis by Stewart, *The Courtier and the Heretic*, 147; 'if we define a Philosopher's Unit as the amount a given philosopher feels is required to sustain himself in good philosophical spirits, then we may deduce: 1 Leibniz Unit = 11 Spinoza Units. That is, you could feed, house, and cloth roughly eleven Spinozas for the price of one Leibniz'. The average income of a skilled Dutch craftsman was 300–400 guilders a year; like Spinoza, Swammerdam maintained that he could live austerely off this amount; Swammerdam to Thévenot, 28 April 1678, Lindeboom, ed., *Letters*, 106–107. Vossius was wealthy enough to employ a servant, Niclaes van Gool, see Molhuysen, *Bronnen* III, 175*.

^{§7} Soll, *The Information Master*, 101. Chapelain was aware of the fact that foreign scholars receiving Louis XIV's gratification might encounter problems concerning the loyalty to the representatives of their own countries. As he wrote to Nicolaas Heinsius, one of the beneficiaries of the French king and historian in the service of the city of Amster-

letters reveal that, although he had no high opinion of Vossius, he thought the Dutchman's expertise in geography and natural philosophy might be of potential interest to the French cause. It is certainly no coincidence that Chapelain was very eager to get a copy of *De motu marium* – a work intended to facilitate long-distance trade.88 The gift by Vossius of 'le volume arabe des tables astrononomiques de Ulug-Beg' (Mirza Mohammed Taraghy, 1394-1449) was very precious and contained very useful information, but since Chapelain and his circle did not know how to interpret this source, it was less welcome.⁸⁹ Referring to the royal pension, Chapelain strongly advised Vossius to dedicate a book to Louis XIV. 90 When Vossius wrote that he would dedicate De Nili origine to Louis XIV, Chapelain replied: 'Ne me remerciés plus de ce que j'ay fait pour vostre service dans cette nouvelle Gratification, mais faites en le Remerciement au Roy dans la Dedicace de vostre livre sans y nommer neanmoins Monsieur Colbert, vous voyer bien pourquoy'.91 Thus, in the most flattering words Vossius dedicated De Nili origine to the French monarch.92 Vossius' friend Van Beuningen, special envoy to the French crown, was mobilized to present the book, as well as a copy of *De natura lucis*, to the King in person. 93 But the reception of the book was lukewarm. Chapelain wrote:

dam, Chapelain to Heinsius, 21 September 1663: 'Ce grands hommes sous qui vous servez n'ignorent pas qu'il en a deux en vous, et que vous êtes homme de lettres avant que d'estre homme d'Etat et leur Ministre. Ils n'ont garde de mal interpreter les bonnes intentions de ce grand prince; au contraire ils tiendront à honneur pour leur république que Sa Majesté y cherche et y trouve des sujects de sa munificence en matière qui ne regarde aucunement les affaires publiques' (Chapelain, *Lettres authentiques*, 392).

⁸⁸ Chapelain to Heinsius, 3 August 1663, Chapelain, Lettres authentiques, 390.

⁸⁹ Chapelain to Vossius, 23 April 1665: '... Mais comme nous avions principalement desiré pour la Geographie et pour la situation des villes de ces Parties Orientales qui nous est inconnüe et que par son tiltre nous avons veu qu'il traitte ex professo de l'astronomie, nous avons apprehendé que ce que nous y cherchions ne s'y trouve que legerement touché' (*Lettres de Chapelain* II, 393). For a discussion of the French reception of this gift, see Dew, *Orientalism*, 111–114.

⁹⁰ Chapelain to Vossius (s.d.[1665]) LUB, Ms. Bur. F 11-II, fol. 276^r.

⁹¹ Chapelain to Vossius, 10 December 1665, Ibid., fol. 278 (not in *Lettres de Chapelain*).

⁹² Vossius, De Nili origine, 'Dedicatio'. See also the contribution by Karel Davids in the present volume.

⁹³ Van Beuningen's mission, however, was in vain: 'Ick soude al voor drie weecken UED tractaet de Origine Nili et aliorum fluminum met het geen de luce daerby gevoeght is aen dese Coningh in eigen handen opgedragen hebben, ende hadde het tot dien eynde met my ten Hooff by een occasie van een audiëntie die ik van syn Mast. verwachte, maer de audientie geen voortganck hebbende heeft de Heer de Lionne geeyscht dat hy 't boek soude mogen lesen ende aen de Coningh overhandigen dat ik niet heb kunnen, nogh ook niet willen weigeren' (Van Beuningen to Vossius, 25 June 1666, LUB, Ms. Bur. F 11-II, fol. 43°).

Je suis très satisfait de vostre nouvel engagement pour addresser au Roy vostre Traitté de l'Origine du Nil et des causes de sa creüe, en attendent que vous lui prépariés quelque offerande plus proportionné à sa grandeur et à vostre force. Vous serés en celle-cy historien, géographe, naturaliste, philosophe et vous signalerés vostre curieux et solide sçavoir en tout les manières également. Il me sera bien doux de vous voir marcher et courir dans une route nullius ante trita solo et laisser bien loin derrière vous tous ceux qui aspirent à la mesme palme.⁹⁴

In the same ambivalent spirit, Vossius honoured Colbert as well. As early as 1664, Vossius presented him with a copy 'en grand papier' of his father's impressive *De theologia gentili*, which, according to Chapelain 'il l'avoit eu très agreable et l'avoit plaçent entre les plus curieux de sa bibliotheque'. ⁹⁵ Although that book obviously could not serve the demands of a mercantilist and absolutist monarchy, Vossius dedicated *en plein public* the 1668 edition to the same Colbert. ⁹⁶ The French statesman was also honoured by Vossius with an 'Alcoran arabe qui, au jugement des connoisseurs, n'a pas son pareil au monde en beauté'. ⁹⁷ Was Vossius playing a sardonic game, or did he really not understand that the French were hoping for information more useful to a mercantile kingdom, jealous of the Dutch supremacy in world trade?

In any event, the relationship between the French court and Vossius was of a calculating nature. On more than one occasion, Chapelain uttered doubts about the quality of Vossius' work and gifts and, in diplomatic words referring to the royal pension, urged him to serve the interests of the French crown. Nevertheless, year after year, the gratification was continued, and Vossius kept receiving letters on behalf of the French king signed by Colbert, as well as money orders.

 $^{^{94}}$ Chapelain to Vossius, 31 July 1665, *Lettres de Chapelain* II, 407; emphasis added. The quotation is taken from Lucretius, *De natura rerum* I, 1–2.

⁹⁵ Chapelain to Vossius, 26 April 1664, LUB, Ms. Bur. F 11-II, fol. 267 (not in *Lettres de Chapelain*).

⁹⁶ G.J. Vossius, *De theologia gentili*, 1668. See: Chapelain to Colbert, 20 April 1668, *Lettres de Chapelain* II, 567–569.

⁹⁷ Chapelain to Vossius, 11 June 1664, Lettres de Chapelain II, 460.

⁹⁸ See, for example, the following lines, following the dedication of *De theologia gentili* to Colbert, Chapelain to Vossius, 20 April 1666: 'J'aurois volontiers la liste de vos oeuvres philologiques que je ne doute point qui ne soient exquis. Je vous dis le mesme de vos exercitations physiques, où les essais que vous en avés laissé me voir que vous monstrerés beaucoup de force et de pénetration. Vous me promettés de m'instruire plus amplement par vous prière et je m'y attents. Cela pourra ne vous estre pas inutile, car je suis icy vostre tenant et vostre champion' (*Lettres de Chapelain* II, 568–569).

⁹⁹ See Colbert to Vossius, 1663, AUB, Ms. 42 Be 1; Colbert to Vossius, 1671 and 1673, AUB, Ms. RK III E. 10, nos 129 and 116; Colbert to Vossius, date unknown, HKB, Ms. 72 D 35.

Vossius, however, did not place all his bets on the French crown. In the Spring of 1664, he visited England, where his father Gerardus Joannes had accepted the post of canon of Canterbury Cathedral in 1629. 100 Chapelain, well informed as always, wrote to Vossius' friend Nicolaas Heinsius (with the obvious intention that the latter make Vossius aware that the French doubted his loyalty):

Je souhaite beaucoup de bien à Mr Vossius, mais je n'ai pas si bonne opinion de sa tête que de celle de feu son Père. Il me semble comme à tout le Monde qu'il va un peu vite et qu'il est bien passioné dans ce qu'il se met une fois dans l'esprit. S'il réussit dans sa prétention il le fera beau voir avec le surplis et le bonnet carré Chanoine de la Cathédrale de Londres.¹⁰¹

Obviously, Vossius had toyed with the idea of settling in England, long before he actually made this move in 1670.

From 1666 intellectual life changed dramatically in Paris. In the circle of Thévenot's *académie*, plans were made to turn this informal club into an official, state-sponsored and state-controlled body. ¹⁰² Utility, not mere curiosity, was the new focus of the pursuit of knowledge. Around 1665 a number of documents circulated, expressing the wish that this Royal academy would consist of

[d]es plus sçavants dans tout les véritables Sciences que l'on pourra trouver, comme en Géométrie, en Méchanique, Optique, Astronomie, etc etc...Et l'on ne recevra personne qui n'excelle au moins en quelqu'une des choses susdites...¹⁰³

In June 1666, the Académie Royale des Sciences was established, with the explicit aim of serving the French state with useful and practical knowledge. While the Royal Society was a club of gentlemen, supported by a royal charter but without subsidy, the members of the Académie were well-paid state officials whose only goal was to serve the King. Among its first members were many visitors of the Thévenot meetings, such as Adrien Auzout, Bernard Frénicle (ca. 1605–1675) and Gilles de Roberval (1602–1675). These were all geometers with a sound knowledge of practical matters, such as timekeeping, navigation, surveying and mapping.

¹⁰⁰ Rademaker, Vossius, 231-235.

¹⁰¹ Chapelain to Heinsius, 29 April 1664, Chapelain, Lettres authentiques, 416.

 $^{^{102}}$ See among others, McKeon, 'Une Lettre'; McGlaughlin, 'La compagnie de Thévenot'.

¹⁰³ OCCH IV, 329.

As Jacob Soll has noted, the establishment of the Académie Royale heralded the birth of a new type of scholarly courtier: no longer loyal to the somewhat idealistic and utopian Republic of Letters but committed only to the interests of the French state, and tending towards secrecy. 104 Colbert obviously had a limited interest in the amateurs and curieux who were fascinated by the craters on the moon, the construction of triremes, illuminated manuscripts of the Koran, or ancient pagan idolatry. Thévenot and Vossius were considered as important scholars in their own right, but a poor fit for the pragmatic and utilitarian scheme of the Académie Royale. Although Thévenot would later claim that he had been the spiritual father of the Academié, he was appointed as a member only in 1685, two years after Colbert's death. 105 After it became clear that Thévenot would not be among the 'plus savants' appointed, he only sporadically visited his own house in the Rue de Tourainne near the Louvre, which by now had become France's centre of power and knowledge. In March 1666, the weekly meetings at Thévenot's place came to an end. 106 Somewhat bitter, Thévenot retired to his country estate in Issy, just outside Paris, where he maintained a correspondence with, among others, Swammerdam and Vossius. He devoted his time to the ongoing *Relations de divers voyages*. From 1668 to 1670 he was in the Dutch Republic to study one of the remaining copies of the Abulfeda manuscripts at Leiden University Library, and to seek a publisher for his translation. 107

After the establishment of the Académie Royale, Vossius moved back to The Hague – obviously convinced that he had little more to expect in Paris than his annual gratification. From 1666 to 1670 he lived in relative peace and quiet. On 30 November 1666 he organized – anonymously – an auction of his books, in which not only valuable manuscripts were offered for sale, but also the most recent English books on natural philosophy, such as Robert Boyle's *Experiments and Considerations Concerning Colours*

¹⁰⁴ Soll, *The Information Master*, 99–101 and *passim*.

¹⁰⁵ Cf. Thévenot's autobiographical sketch in the *Bibliotheca Thevenotiana*, fols 2^r-3^v.

¹⁰⁶ Chapelain to Steno, 15 March 1666: ... le séjour que Mr Thévenot a fait tout l'hiver à sa maison d'Issy ayant rompu notre commerce...' (Lettres de Chapelain II, 447). See also Chapelain to Steno, 27 May 1667: 'Mr Thévenot s'est opiniastré depuis 18 mois à ne prendre point maison à Paris pour philosopher et spéculer, dit-il, avec plus de liberté à la campagne qui le retient depuis ce temps-là' (Lettres de Chapelain II, 514).

¹⁰⁷ See for example Chapelain to Thévenot, 21 December 1668, Lettres de Chapelain II, 608–609; McGlaughlin, 'Une lettre de Melchisédec Thévenot'. On this episode see Dew, Orientalism, 107–125.

¹⁰⁸ Relatively few letters survive from this period, cf. LUB, Ms. Bur. F 11, passim.

(London 1664).¹⁰⁹ As Astrid Balsem points out in her contribution to this volume, Vossius preferred the Latin translations of books like these. A precious quadrant, offered to Rudolph II by Tycho Brahe, was on offer as well. The reason for this auction may have been twofold: lack of space in his house and the need for cash. During these years, Vossius maintained his interest in natural philosophy. For example, he occasionally discussed the results of alchemical experiments with Spinoza, who lived in nearby Voorburg.¹¹⁰ Chapelain complained that Vossius, despite the continuing royal gratification, did nothing to favour the French.¹¹¹

Vossius in England

During these relatively tranquil years, the image of Vossius the *virtuoso* or Vossius the *curieux* was transmitted throughout Europe. For example, Henry Oldenburg, the secretary of the Royal Society, took a keen interest in the work of Vossius.¹¹² During his student years in Utrecht, Oldenburg had asked Vossius' father to recommend him as a tutor to 'either the son of a nobleman or the son of some honest merchant'. In 1660 and 1661, Oldenburg had travelled through the Dutch Republic, meeting, among others, Christiaan Huygens and Spinoza.¹¹⁴ Oldenburg kept a close eye on Dutch intellectual culture, as did so many other Englishmen during this period. Vossius' De motu marium et ventorum had aroused interest in the Royal Society, and this interest was certainly confirmed when he decided to settle in England in 1670. The curious world of the Royal Society was a more natural habitat for him than the businesslike and state-ruled Académie Royale, which - as Christiaan Huygens was to find out - showed increasing hostility towards foreigners. While Huygens was on sick-leave in The Hague in 1670 and 1671, Vossius had the time of his life in London. Although Colbert would write to Vossius in person in 1671 that his pension was secured for that year, the allowance was in fact ended in 1673, despite the scholar's protests. 115 At the same time, Charles II presented

¹⁰⁹ Catalogus librorum illustrium... 1666. This interesting source is discussed by Astrid Balsem, below, 284–294.

¹¹⁰ Spinoza to Jarig Jelles, 25 March 1667, in: Spinoza, *Briefwisseling*, 260–263.

¹¹¹ Chapelain to Thévenot, 18 February 1669, Lettres de Chapelain II, 624.

See, for example, Oldenburg to Boyle, 21 November 1665, CHO II, 615.

¹¹³ Oldenburg to G.J. Vossius, 16 August 1641, CHO I, 5.

¹¹⁴ Boas, *Oldenburg*, 60–64; *CHO* I, 420–439; 445–472; Spinoza, *Briefwisseling*, 71–104; 114–120; 146; 148; 212–214; 221–237.

¹¹⁵ Colbert to Vossius, 20 February 1671, LUB, Ms. Bur. F 11-II, fol. 287°.

Vossius with a prebendary in the chapel of Windsor, which secured him a stable income.

While visiting libraries and collecting manuscripts, Vossius took a strong interest in the activities of the Royal Society of which he had been a Fellow since 1664. Already at the meeting of the Society which took place on 3 February of that year, a report by Vossius aroused much interest:

Mons. Vossius communicated a relation of a child taken in Lithuania among bears in a bear-hunting, and then at court of the queen of Poland, where endeavours were used to reduce the child to some humanity, whence it seemed to have altogether degenerated by its long conversation with wild beasts. This relation was attested by a French gentleman, as an eye-witness, accompanying the two sons of the marshal DE GRAMMOND. Sir ROBERT MORAY was desired to make farther inquiry into the fact by a letter to Dr. Davison, living in those parts. 116

Two months after the account of this proto-Mowgli, Vossius was elected Fellow, and since then, the Society and the community of discourse around it, showed much interest in Isaac's activities. 'Je m'imagine que mon bon amy Monsieur Vossius y est encore', Thévenot wrote to Oldenburg in 1671, taking the liberty to enclose a letter to Vossius. 'I7 Although there were some discussions on matters of interpretation and explanation, Vossius' interests were in line with the gentleman-*virtuoso* approach of the Society. A good example of his active engagement with the Society is the discussion that took place at the meeting of 19 June 1672:

Dr. GODDART and Mr. CONYERS having brought in several figures for speaking trumpets, and Mr. HOOKE having also drawn one for the same purpose, the operator was ordered to attend Dr. GODDART, and to take directions from him, for causing such instruments of the produced figures to be made as the doctor should appoint: and Mr. HOOKE was desired to make also a trial of his figure. Dr Isaac VOSSIUS mentioned, that they had a way at Amsterdam of making bells give a much sweeter sound than ordinary, retaining the usual bell form, but employing only half the quantity of the metal, and observing a great equality in casting it.¹¹⁸

Robert Hooke noted, after attending a meeting of the Society in March 1675: 'Dr Vossius his papers Read about Archimedes burning glasses made of many flats and of the inversion of the Spots in the Moon, both

¹¹⁶ Birch, *History of the Royal Society* I, 378. I owe this reference to Dirk van Miert.

¹¹⁷ CHO VIII, 311-313.

¹¹⁸ Birch, History of the Royal Society II, 54-55.

ingenious'.¹¹⁹ 'The Royal Society', Henry Oldenburg wrote to Vossius on 6 March 1675, 'gladly received both your discourses, namely on the spots on the moon and on the Archimedian burning mirror'.¹²⁰ Oldenburg urged Vossius to 'draw more matters from your rich store... What you to me personally hinted not long since about ballistic matters would wonderfully please it'.¹²¹ Charles II repeatedly urged Vossius to make a globe of the earth, on which the true measures and shapes of the lands and the oceans were represented.¹²²

However, Vossius' ideas were not uncontested, nor taken seriously by all, to be sure. As one critic, Narcissus Marsh, remarked, echoing the words of Jean Chapelain from ten years earlier:

Whatsoever Dr. Vossius says, because his name is Vossius, *ipse dixit*, is enough to make it believed; which seems to me the more insufferable because they cannot, or else will not make any distinction between Gerard and Isaac Vossius, nor consider which way a man's talent lies. 123

As David Katz has described in great detail elsewhere, during the two decades of Vossius' stay in England, he returned to what originally had been his core business, namely textual criticism. Katz even called Vossius 'the founding father of biblical criticism in England'. Indeed, in these years his pioneering work on the Sibylline oracles were published, as well as his analyses of the rhyme and rhythm of ancient poetry and his edition of Catullus. Moreover, his earlier studies in chronology and the Septuagint were still debated, if not overtly attacked. Yet even during his English years, Vossius retained a strong interest in the subjects which had fascinated learned men in the 1650s and 1660s: geography, natural history and natural philosophy, as his *Variarum observationum liber* (1685) makes clear.

¹¹⁹ Hooke, Diary, 151. See also Birch, History of the Royal Society II, 192.

¹²⁰ Oldenburg to Vossius, 6 March 1675, CHO XI, 208-209.

¹²¹ Ibid.

¹²² 'Den koning heeft mij meermalen aengesproken en vermaent om een globe te doen maken met de behoorlijkste distantie van landen en waters...Heb genegentheijt tot soodanigen arbeijt, maer wenste wel een ervare globe of kaertemaker te hebben die volgens mine minute en tablature exactelijck int werk konde stellen de breete en lengte der plaetsen volgens mijne aenteekeningen, heb tot noch toe niemant hier gevonde die mij behaegt' (Vossius to Van Beuningen, 23 February 1688, LUB, Ms. Hug. 45).

¹²³ Quoted in Katz, 'Isaac Vossius and the English Biblical Critics', 165. Also quoted by Grafton, above, 71.

¹²⁴ Katz, 'Isaac Vossius and the English Biblical Critics', 184.

¹²⁵ See Scott Mandelbrote's article earlier in this volume.

The Dutch Background

There are reasons to read Vossius' remarkable career as a successful attempt to gain recognition as a natural philosopher in the international arena, and to receive honours in the form of financial support by the leading monarchs of his age. Intellectual recognition, financial support and the pursuit of knowledge obviously went hand in hand. Vossius' idiosyncratic way of dealing with the major intellectual questions of the century – ranging from the date of the Creation *via* the nature of ancient Chinese science to the existence of the vacuum, and so on – did not go unnoticed at courts and in scientific societies. Even in his own day, he was sometimes considered an eccentric. And yet, for a proper understanding of his carreer, we should take his background into account: not only that of the brilliant as well as tragic Vossius family, but also the context of seventeenth-century Dutch culture in general.

In his recent *Matters of Exchange*, Harold Cook has brought the lively scientific culture of the Dutch Golden Age to the attention of a larger public. Cook stresses the relation between the leading Dutch position in the emerging global trade and the rise of the New Science. Although Cook, in my opinion, could have paid more attention to the metaphysical and religious backgrounds of Dutch scientific culture, he is certainly right in stressing the leading role played by the Dutch mercantile elite. 128 Since the start of the Dutch Revolt around 1570, many families of humble origin artisans, traders - had been able to rise to power within two or three generations. Making their fortunes in the global trade and the emerging industry, they combined a keen self-interest with a commitment to the public weal. Wealth, political power, and a fascination for art and intellectual culture went hand in hand. With some justice, the mercator sapiens described in Caspar Barlaeus' inaugural lecture for the Amsterdam Athenaeum Illustre in 1632, is seen as an embodiment of the mentality of the Dutch Golden Age.¹²⁹ The young Republic's ruling élite did more than pay lip-service to the arts and the sciences. 130 For example, Johan de Witt (1625–1672), by far the most influential politician in the Republic

¹²⁶ Katz, 'Isaac Vossius and the English Biblical Critics', 169 and passim.

¹²⁷ See: Rademaker, Vossius, 1-12; 331-348; Blok, Vossius and his Circle, 13-26.

¹²⁸ Cook, *Matters of Exchange*; see also Davids, *Rise and Decline*; Van Berkel, 'The Dutch Republic. Laboratory of the Scientific Revolution'. Cf. Jorink, *Reading the Book of Nature*.

¹²⁹ See, for example, Cook, *Matters of Exchange*; Peters, *Wijze Koopman*. On Barlaeus see: Van Miert, *Humanism in an Age of Science*, 49–54; 226–229.

¹³⁰ Jorink and Ramakers, eds, Art and Science.

between 1653 and 1672, was a very talented mathematician and friend of Christiaan Huygens. De Witt's *Elementa curvarum linearum* was in 1659 published as an appendix to Frans van Schooten's translation and edition of Descartes' *Geométrie*. Constantijn Huygens was both a statesman and Descartes' most influential friend in the Dutch Republic, and himself an indefatigable researcher into nature's secrets. 133

The influence of the culture of curiosity on the Dutch élite can hardly be overstated. Seen from this perspective, it is worth taking a closer look at Vossius' friends. Although Vossius himself did not come from a wealthy family with political aspirations, many of his friends belonged to this group. Among these were many aristocrats and Dutch regents who shared his interest in intellectual culture. For example, he had a lifelong friendship with the Dutch regent Coenraad van Beuningen, which started in 1644.¹³⁴ It was certainly no exaggeration that Van Beuningen, in a letter to De Witt, called Vossius 'one of those friends whom I love like myself'. 135 Van Beuningen was, among other things, ambassador to Sweden and France, burgomaster of Amsterdam, and director of the VOC, the Dutch East India Company. When Van Beuningen returned from his stay in Paris to the Dutch Republic in 1667, Vossius offered him accommodation in his house in The Hague, as he had done before. 136 Van Beuningen shared many of Vossius' interests, read all of his books, and corresponded at length with his friend on all kinds of learned subjects, ranging from the interpretation of the Septuagint to eclipses, and from the growth of pearls to the geography of China. 137 Both were intrigued by the art of navigation, Van Beuningen for practical reasons in his capacity as director of the VOC

¹³¹ See the introduction of Grootendorst, ed., Jan de Witt's Elementa curvarum linearum,

¹³² De Witt, *Elementa curvarum linearum*. Vossius' copy is in LUB, shelfmark 2008 E 40: 4.

¹³³ Jorink, Reading the Book of Nature, 1–12 and passim.

¹³⁴ Blok, *Vossius and his Circle*, 55 and *passim*. No recent biography of this fascinating figure is available; see Roldanus, *Van Beuningen*.

Van Beuningen to De Witt, 1667, De Witt, Brieven II, 431.

¹³⁶ Van Beuningen to Vossius, 26 August 1667, LUB, Ms. Bur. F 11-II, fol. 48v.

¹³⁷ See for example the copies of letters from Van Beuningen to Vossius from the 1640s to 1688 in LUB, Ms. Bur. F 11-II. Christiaan Huygens often acted as a go-between when both he and Van Beuningen were living in Paris in the early 1660s; see for example: 'Utrumque exemplar libri tui de translatione LXX Interpretibus et de Chronologia sacra cum eis quae de Aetate mundi, et de deluvio commentatus est ante quatriduum mihi tradidit Hugenius' (Van Beuningen to Vossius, 26 November 1661, LUB, Ms. Bur. F 11-II, fol. 46').

and Vossius merely for intellectual reasons.¹³⁸ Like Charles II had done before him, Van Beuningen urged Vossius to make a general map of the earth.¹³⁹ Not unlike his friend, he held unorthodox ideas on religion: he was fascinated by Jacob Boehme (1575–1624), inspired by the spiritualist Collegiant movement and, in the sad last years of his life, obsessed with millenarian prophecies.¹⁴⁰ During the years of his professional career, he was a typical example of the late-seventeenth-century Amsterdam burgomaster: highly educated, and interested in political affairs as well as in culture in the broadest sense of the term.

Another of Vossius' friends was Nicolaas Witsen (1641–1717), son of an Amsterdam burgomaster, and educated by, among others, the mathematician Alexander de Bie (1620–1690), the pansophist Jan Amos Comenius (1592–1670) and the famous Leiden professor of mathematics and Oriental languages, Jacob Golius (1596–1667). Witsen is commonly remembered for his interest in geography and his fabulous collections of curiosities, which included antiquities as well as the latest *naturalia* brought in from the East and West Indies. Witsen was for a long time a good friend of Vossius, with whom he shared a passion for China, as well as for travel accounts and maritime issues. The two often lent books and manuscripts to each other. Like Van Beuningen, Witsen became a diplomat, a burgomaster of Amsterdam, and a director of the VOC. His network – including relatives, clients and aspiring friends – spanned the entire earth. He studied Greek, Coptic, Arabic, Turkish, Aramaic and cuneiform, as well as more obscure languages such as the Khoisan languages and Kalmyk. He

¹³⁸ Vossius to Van Beuningen, 23 February 1688: '[Navigatie] wesende deselfs kennis oneindig en nootsakelijker voor schippers en piloten, als wel voor liefhebbers van wetenschap, die eerst stellen het principael, eer sij komen tot exceptie en omstandigheden' (LUB, Ms. Hug. 45).

¹³⁹ Van Beuningen to Vossius, 1 June 1685, '... te ontwerpen een gemeene Caert van de aertkloot... tot het gemeen nut van veelen' (LUB, Ms. Bur. F 11-II, fol. 105').

¹⁴⁰ Cf. Fix, Prophesy and Reason; Van der Wall, Petrus Serrarius.

¹⁴¹ Peters, Wijze koopman; Van Miert, Humanism in an Age of Science, 74; 129 n. 61.

¹⁴² Jorink, Reading the Book of Nature, 326-333.

¹⁴³ See for example Witsen to Vossius, ¹¹ Oktober (s.d. [1670]), apparently on sending engravings from his *Aeloude en heedendaagse scheeps-bouw*: ¹Ik kan niet naelaten UE te communiceren al het geen my nu toegekomen is tot vermeerderingh in de kenisse van de geographie, waar in UEd uitstekenste van Europa werdt geoordeelt, namentlijck een kort begrijp van een voyagie die mij uit Muscovien is gesonden en gedane uit Siberien tot Pekin in Sina waervan ik ook dese met UE heb gesproken' (LUB, Ms. Bur. F ¹¹-II, fol. ^{158v}).

¹⁴⁴ Witsen to I. Vossius, (s.d.), AUB, Ms. RK III E. 10, no. 351; Gebhard, *Witsen* II, 373, 377, 395, 431 en 442; Molhuysen, *Bronnen* IV, 22*; Peters, 'Study', 40–41.

corresponded on the shared roots of the languages of the world. 145 Like so many intellectuals, Witsen was deeply fascinated by the supposedly symbolic nature of hieroglyphs and Chinese characters; he closely followed the attempts of Maturin Veyzière de la Croze (1661–1739) to decipher them both using Coptic.¹⁴⁶ Witsen owned all kinds of objects from China, ranging from figurines and drawings of flora and fauna to a compass and a Chinese almanac. Like Vossius, he was virtually obsessed by the traces of the Flood in nature and in histories. He published books on ancient and modern shipbuilding, as well as on the peoples and natural history of 'Tartary' (an umbrella term for all countries east of Poland), both subjects of great interest to Vossius. 147 Witsen's reports to the Royal Society were sometimes included in the *Philosophical Transactions* – for example on ancient Persepolis, his pioneering map of Tartary, shells found in the East Indies, and 'the horrible burning of some mountains of the Molucco Islands'. 148 The Royal Society (which appointed him a Fellow in 1689) took great delight in the curiosities Witsen kept sending, such as a sketch and description of the newly-discovered *pipa* toad from Suriname. 149

The last person to mention here is yet another Amsterdam burgomaster and director of the VOC, Johannes Hudde, an elder nephew of Nicolaas Witsen. Hudde, whom we met before in connection with Vossius' fascination for the microscope, is an intriguing person, of whom too little is known. He was one of the most gifted mathematicians of the century and, like his friend and political ally De Witt, part of his work was included in Van Schooten's edition of Descartes. Moreover, Hudde was

 $^{^{145}}$ Von der Schuldenburg, Leibniz als Sprachforscher, 28; Sebeok, 'The Seventeenth-Century Cheremis'.

 $^{^{146}\,}$ ÅUB, Ms. Be 74 a; Ms. Be 61. See also the contribution by Thijs Weststeijn elsewhere in this volume

 $^{^{147}}$ See also: Witsen to Vossius, 1670, 6 November (s.d. [1670]), LUB, Ms. Bur. F 11-II, fol. $_{159}^{\rm v}$.

¹⁴⁸ *Philosophical Transactions* 19 (1697), 529–532. As is well known, the publication of 'A letter, not long since written to the publisher by an Experienced person residing at Amsterdam, containing a true description of Nova Zembla', *Philosophical Transactions* 9 (1674), 3–4, containing information by Witsen, probably doctored by Vossius, sealed the end of their friendship: see the contribution by Karel Davids, below, 196 and 203.

¹⁴⁹ Witsen to the Royal Society, 25 February 1690: '... and if the Society be desireous to see it in its Colours, I will have it drawn after the Animal itself: Which for my farther Satisfaction was sent over from Suriname' (London, Archive Royal Society, Ms. LBC 11 (1), fol. 184). Hans Sloane later noted: 'This was then new to Every body & it was thought a matter of such curiosity by some that the letter & draught were both imbezzled some way or other & never heard of (LBL, Ms. Sloane 4025, fol. 251). See: Jorink, *Reading the Book of Nature*, 331–332.

¹⁵⁰ De Waard, 'Hudde'; Vermij, 'Hudde'; Vermij and Atzema, 'Specilla circularia'.

154

extremely interested in optics. In fact, it was Hudde who provided the impulse for the microscopic research undertaken in the Dutch Republic in the 1660s by men like Huygens and Swammerdam. Hudde was interested not only in the mathematical side of optics, but also in the more practical skills of lens-making and grinding. In long letters, he discussed optical problems with Huygens. He deeply admired Hooke's *Micrographia* (1664), although he regretted being unable to read English. ¹⁵¹ It was Hudde who taught Swammerdam the benefits of a single-lens microscope. ¹⁵² It was also Hudde who gave microscopes to, for example, Monconys and Vossius. ¹⁵³ Later, in 1688, Hudde and Van Beuningen, acting on behalf of the VOC, commissioned Vossius to write a report on tropical winds and monsoons. ¹⁵⁴

There is another interesting aspect of Hudde. Like his friends Van Beuningen and Vossius, he held unorthodox religious views. What precisely he believed (or did not believe) remains a mystery due to lack of sources. But it is a historical fact that the young and promising regent in 1666 engaged in a lively discussion on the uniqueness of God with a relatively unknown philosopher, Benedictus Spinoza. Hudde and Spinoza shared an interest not only in religion, but also in optics. Together with their mutual acquaintance Christiaan Huygens they formed the pioneering triumvirate of the theory and practice of lens production in the Dutch Republic. And Isaac Vossius knew them all very well.

Conclusion

Vossius was not a courtier, nor a Cartesian or a Spinozist. I would rather argue that he was much more of an exemplary figure of the intellectual culture of the seventeenth century. Over the last decade, it has increasingly become clear that the so called 'scientific revolution' was more than a predetermined progress of modern astronomy and physics, via Copernicus,

¹⁵¹ Hudde to Christiaan Huygens, 5 April 1665: 'T is mij zo leet, dat ik nu geen Engelsch kan, dat, zo mij geen gewichtiger dingen belette, ik zouw expres engelsch gaan leeren, al was t maar alleen om . . . deze Micrographia van Hook te lezen' (*OCCH* V, 309).

¹⁵² Swammerdam, Historia insectorum generalis, 56.

¹⁵³ Monconys, Journal des voyages, 152–164.

¹⁵⁴ Gaastra, Beleid en bewind, 162.

¹⁵⁵ Spinoza, *Briefwisseling*, 241–252; Vermij and Atzema, '*Specilla circularia*'. Hudde would later continue the discussion on this subject with John Locke, using the Amsterdam professor of theology Philip van Limborch as an intermediary; see Van Limborch to Locke, 28 September 1693, Beer, *Correspondence* VI, no. 2318.

Kepler, Descartes and Huygens, to Isaac Newton. Anthony Grafton and others have brought the inextricable link between scholarship and science to our attention. Others have stressed the importance of the 'culture of curiosity' and the great influence of writers such as Athanasius Kircher. Parallel to this, Newton scholarship of recent years has made it abundantly clear that Sir Isaac was extremely occupied by alchemy, millenarian prophecies and biblical criticism. What would later be called 'science' was not at all clear during this period. As William Ashworth put it in a somewhat different context:

The Scientific Revolution was, after all, itself a historical revolution. It changed forever the way we would view Aristotle, Ptolemy, Galen. It altered the very concept of historical process. It is no simple coincidence that scientists of the seventeenth century developed keen interests in such matters as the origins of language, the early geological history of the earth, the settlement of the New World, the chronology of Egyptian and Chinese history, the collection of fossils, the early history of Christianity. ¹⁶⁰

And this was the very world in which Isaac Vossius operated, changing himself from a silent librarian and philologist into a renowned geographer and controversial natural philosopher.

In this sense, Isaac Vossius was a less marginal figure in his own day then he has become in the historiography of early modern intellectual and scientific culture. On the contrary, he inhabited the same world as Huygens, Spinoza, Oldenburg, Newton and Kircher. Moreover, it should be stressed that he was much more representative of seventeenth-century Dutch intellectual life than is usually assumed. Dutch intellectual culture of the Golden Age is usually described as pragmatic, utilitarian and non-(if not anti-)metaphysical. The heroes in that story are Simon Stevin, Isaac Beeckman, René Descartes and Christiaan Huygens. Recent scholarship, however, basing itself on a broad definition of science and intellectual culture, has underlined the extremely rich and multi-faceted character of

¹⁵⁶ See, for example, Cohen, Scientific Revolution; Shapin, Scientific Revolution.

 $^{^{157}}$ See, for example, Grafton, Defenders of the Text; Idem, Worlds made by Words; Blair, The Theatre of Nature.

¹⁵⁸ Kenseth, ed., *Age of the Marvelous*; Daston and Park, *Wonders and the Order of Nature*; Findlen, ed., *The Last Man Who Knew Everything*.

¹⁵⁹ The most recent overview is: Mandelbrote and Pulte, eds, *Reception of Newton*.

¹⁶⁰ Ashworth, 'Natural History', 324.

¹⁶¹ See, for example, Dijksterhuis, *Mechanization of the Worldpicture*; Cohen, 'Open and Wide'; Van Berkel, *Isaac Beeckman*; Van Berkel, Van Helden and Palm, eds, *History of Science*; Dijksterhuis, *Lenses and Waves*.

seventeenth-century Dutch culture.¹⁶² Among other things, interest in the wonders of nature, the culture of collecting, biblical criticism, rationalist philosophy and the need for financial gain and career opportunities went hand in hand. Isaac Vossius, eccentric as he may seem at first sight, did not betray this background.

 $^{^{162}}$ Cf. Israel, Radical Enlightenment; Cook, Matters of Exchange; Jorink, Reading the Book of Nature.

A VIEW FROM THE MOUNTAINTOP: THE DEVELOPMENT OF ISAAC VOSSIUS' OPTICS, 1658–1666

Fokko Jan Dijksterhuis

Mount Ida...reveals the rising sun differently from the way it is usually viewed in other lands. In fact, for people watching from the very peak, more or less from the middle of the night on, scattered fires appear to shine.¹

In 1658, Isaac Vossius devoted a comment to this observation of Pomponius Mela in his first-century *Chorographia*. The comment turned into a lengthy exposition on phenomena of light in the atmosphere. Over the next years the comment developed into an elaborate account of the nature and the properties of light, and became part of an ongoing dispute with several correspondents over matters optical. Thus came into being Vossius' optics.

Vossius' comment contained some of the basic elements of the optical theories he elaborated in his later writings. In this chapter I will track the textual trail of Vossius' optics, sketching his conceptions of light and its properties and the way these developed. I will locate his optics in the intellectual landscape of seventeenth-century natural philosophy, both scientifically and socially: I will deal with the ideas about light and images and with the intellectual circles that were mobilized by Vossius' opinions. The interaction with others was crucial to the development of Vossius' optics. Although it is quite well-known that Vossius dealt with optics, historians have paid relatively little attention to the contents of his ideas. He is sometimes mentioned in passing with references to fragments of his doctrine, and mostly to illustrate the opposition to René Descartes

¹ 'Ipse mons vetere Divarum certamine, & iudicio Paridis, memoratus, orientem solem aliter, quam in aliis terris solet aspici, ostentat: namque ex summo vertice ejus speculantibus, penè à media nocte spargi ignes passimque micare, &, ut lux appropinquat, ita coire ac se conjungere videntur, donec magis magisque collecti, pauciores subinde & una ad postremum flamma ardeant. Ea cum diu clara & incendio similis effulsit, cogit se ac rotundat, & fit ingens globus. Diu is quoque grandis, & terris adnexus apparet: deinde paulatim decrescens, & quantò decrescit, eò clarior fugat novissimè noctem, & cum die jam sol factus, attollitur' (Pomponius Mela, De Chorographia I, xiix; cited from Vossius, Observationes ad Pomponium Melam, 20), translation from Romer, Pomponius Mela's Description of the World, 61. See also the contribution to this volume by Dirk van Miert, who lists the manuscripts and annotated printed works of Mela in Vossius' library, 32, n. 65.

(1596–1650).² He is best known for making public, in *De lucis natura et proprietate* (1662), Willebrord Snellius' (1580–1626) priority over Descartes in discovering the law of refraction. Vossius' disclosure of Snellius' achievement is often explained by his anti-Cartesianism, but I will argue that it provided him in the first place with support in the discussion of his own optics. The Snellian analysis of refraction fitted perfectly in Vossius' ideas on the nature of light and refraction.

Comments on Mela

Geography was one of Vossius' principal interests. He turned to Mela after his project for an edition of Ptolemy's *Geographia* had run aground in the early 1650s. The Chorographia of Mela was an altogether different affair than the *Geographia*. It was a lively description of the peoples and places of the known world, de situ orbis. The text was revived in the fourteenth century by Petrarch and then became rather popular, principally under the title *De situ orbis*.³ The first printed edition appeared in 1471, quickly followed by others and a hundred editions were counted around 1800. Vossius' commentary became the centre of dispute in the philological circle around him. It contained a critique of the work of his teacher Claude Saumaise (1588–1653) on Roman geography and provoked the criticism of Jacobus Gronovius (1645-1716), who published his own commentary on Mela in 1685.4 The ensuing debate was closed in 1722 when Gronovius' son Abraham (1695–1775) published an inclusive edition of all of Vossius' and Gronovius' commentaries, with addition of those of others.⁵ Rather than a purely philological edition, Vossius' 1658 Observationes ad Pomponium Melam de situ orbis was a copious commentary on Mela's observations, with narratives digressing quite far away from Mela's text. The comments in footnotes are about five times as long as the original text. The comment that interests us here concerns a short passage in Mela where Vossius' footnote covers almost eight pages.6

² Wilde, Geschichte der Optik I, 223–224, 317–320; OCCH XIX, 392–393; Thijssen-Schoute, Nederlands Cartesianisme, 610–612; MacLean, 'Kleurentheorie', 223–225.

³ Pomponius Mela, Kreuzfahrt durch die alte Welt, 16-22.

⁴ Pomponius Mela, Libri tres de situ orbis, cum notis I. Gronovii.

 $^{^5}$ *Pomponii Melae de situ orbis libri III*, which went through at least three editions in the eighteenth century.

⁶ Vossius, *Observationes* I, xviii ('Aeolis'), 20. The commentary runs from page 89 to 97. A second edition of Vossius' *Observationes* was published by Leonard Strick in Francker in 1700.

Mela's observation concerns the remarkable display of the sunrise viewed from mount Ida in the Aeolis region close to Troy, now Kaz Daği on the Gulf of Edremit in northwestern Turkey. He explains that from midnight on scattered lights are seen on the horizon that gradually grow into 'a single flame', eventually developing into a huge sphere rising slowly to dispel the night. Vossius commented that this was indeed a remarkable observation, in particular because nothing of it is seen by people in the plains at the foot of the mountain. In his comment Vossius tried to find out what Mela had meant. In true philological fashion he cites ancient sources for this phenomenon and comparable ones. Yet, he also added recent accounts that brought the newly discovered parts of the world into the discussion. In this way Vossius went plus ultra than the ancients. He went even further by moving beyond textual sources and including eyewitness accounts of seamen. These served to establish the truthfulness of Mela's observation, which in turn became a starting point for Vossius to try and attain an explanation of the curious phenomenon through an inquiry of the nature of light and refraction by means of empirical and rational considerations.

As Davids explains elsewhere in this volume regarding Vossius' geography, the Mela-commentary stood at a turning point in his career where Vossius turned from producing text editions to studying specific topics: 'Classical texts now became the raw material for the development of his own vision about the Earth'.8 Vossius' optical considerations in the Melacomment were still closely linked to his geographical interests. He thought the visual phenomena should be explained on the basis of their geographical location. The Ida sunrise was a meteorological phenomenon and its explanation should be sought in the interaction of light with the atmosphere. To Vossius it was clear that the authorities in meteorology did not provide satisfactory answers. Aristotle did not address any comparable subject and Vossius deemed Descartes' theory of vapours outright ridiculous. 9 Vossius here seized the opportunity to run Descartes down, but at this point he did not explicitly go against his optics as such. Foreshadowing his critique on Descartes in *De natura lucis*, Vossius sought the most efficient explanation possible and turned to optics. In astronomy the effect of atmospheric refraction was well known and the deviations of observed celestial positions from

⁷ See n. 1.

⁸ See Karel David's contribution in this volume, below, 191–192.

⁹ 'Prorsus vero sunt ridiculae nubes istae Cartesii...' (Vossius, *Observationes ad Pomponium Melam*, 123).

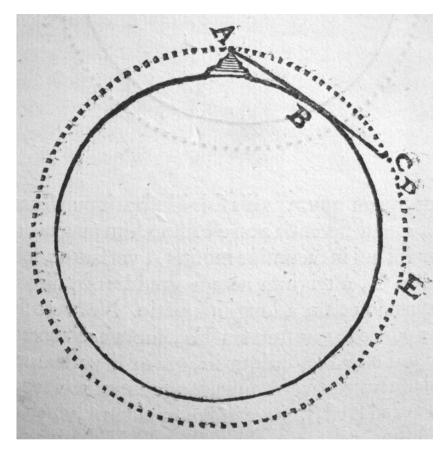


Fig. 1. Vossius, *Observationes ad Pomponium Melam*, illustration on page 125 (LUB).

their actual places could be accounted for quite accurately. However, as to the nature and the size of the atmosphere astronomers were not unequivocal. Tycho Brahe (1546–1601) was an undisputed authority but did not provide Vossius with a definite answer. Consequently he went to the heart of the matter and drew on his own power of reason, posing the question what exactly was seen and how this could be explained for.

The essence of the problem was that it was only visible from the top of the mountain, not from the plains (fig. 1). This seemed to defy the rules of geometry. Vossius provided a figure to explain the geometry. Person A

¹⁰ 'Haec nec intelligunt, nec credunt, qui in planis vivunt, ac regulis geometriae adversari existimant' (Vossius, *Observationes ad Pomponium Melam*, 121).

on top of the mountain and person B in the plains have the same horizon that intersects the outer bound of the atmosphere at C. A geometry of straight rays would suggest that both persons have the same line of vision, as B is on line to the horizon seen from A. Yet, contrary to expectations of basic geometrical optics, persons A and B see different things. As a result of atmospheric refraction both can see the sun below the horizon before it actually rises. Yet, Vossius explained, someone at the mountaintop can see it much earlier than someone in the plains. A sees it when it is much further below the horizon, at E instead of D, maybe some 30 degrees below.¹¹ Apparently someone on the top views the horizon over the head of someone in the plain. According to Vossius this is not the effect of the sunlight itself or of reflections along the sunlight's path, but of the refraction of the sun's light in the upper regions of the atmosphere. At this point Vossius arrived at the core of his argument. He provided an account of the optics of atmospheric refraction that he founded upon an account of refraction in general. According to Vossius a refracting medium continuously acts upon light, a claim he substantiated by an experiment in which a concealed object is visible through a bent tube in water. In the Melacomment this is only cursorily described and difficult to grasp, but I will return to the experiment shortly. Vossius explicitly defied the authority of writers on optics who maintained that refraction only occurs at the surface of a medium.¹² To fully grasp his claim, elaborated rather concisely in the comment on Mela, we turn to the debate that followed.

First a brief overview of the state of optics around 1650. It is important to realize that Vossius' analysis was based on the teaching in optics as it had been established in the Middle Ages by Alhacen and Witelo. Their texts had been published by Friedrich Risner (ca. 1533–1580) in the *Opticae thesaurus* (1572), which remained the standard textbook in geometrical optics well into the seventeenth century. In 1604 Johannes Kepler (1571–1630) had published *Ad Vitellionem paralipomena*, literally additions to Witelo but in fact a break with tradition. Whereas Alhacen and Witelo analysed the formation of images in terms of single rays, Kepler did so in terms of the focusing of bundles of rays. Christoph Scheiner (ca. 1575–1650) in *Oculus, hoc est fundamentum opticum* (1619) and Descartes in *La dioptrique* (1637; one of the essays added to *Discours de la Méthode*) adopted Kepler's approach, although what they primarily took over was the new

¹¹ Ibid., 124–125.

¹² 'Verum antequam definamus, indicandus est error eorum qui putant refractionem non fieri nisi in recta linea, ad superficiem refracta...' (Ibid., 125).

conception of the retinal image as the basis of vision. The mathematical intricacies of the *Paralipomena* remained largely reserved for specialist readers and Kepler's theories were not generally accepted. *La dioptrique* is a landmark in optics because it presented an exact law of refraction, sought after by students of optics since antiquity. Descartes elaborated a natural philosophical doctrine of light in which the mathematical property of light propagation was a central feature, and he used it to derive the laws of reflection and refraction. Debates about Descartes' claims started in the late 1650s with the disclosure of Fermat's and Vossius' critiques, and were continued by the new discoveries and conceptions of Francesco Maria Grimaldi (1618–1663), Robert Hooke (1635–1703), Isaac Newton (1643–1727) and Christiaan Huygens (1629–1695).¹³

Huet Responds

When the edition of Mela came off the press, Vossius naturally dispersed it amongst his scholarly friends and contacts. One copy went to viro incomparabili Pierre-Daniel Huet (1630–1721).14 Huet had been an intimate member of the circle of humanists around Vossius' teacher and protector Claude Saumaise. He was an aspiring scholar from Caen who had been invited by his teacher Samuel Bochart (1599–1667) to join him on his trip to Sweden in 1652. In Amsterdam he met Vossius, another member of the travel party, who welcomed him heartily and expressed his hope that they might develop a longlasting friendship.¹⁵ So they would, corresponding frequently on scholarly matters. On his way to join the party in Amsterdam, Huet had also met Saumaise, who developed a great affection for him. Huet would become one of the closest intimates of Saumaise. 16 The true love of the circle was, nevertheless, philology, which they brought to Queen Christina's court in Stockholm, where it rivalled the new philosophy of Descartes. Huet was much impressed by Vossius' Mela edition and he read this 'monument of erudition' with great care. 17

¹³ For an overview see Dijksterhuis, *Lenses and Waves*, 225–235, which, by the way, also fails to give a proper account of Vossius' pursuits in optics. For an excellent account of medieval optics see Smith, *Alhacen's Theory of Visual Perception*.

¹⁴ Tolmer, Pierre-Daniel Huet, 212-213.

¹⁵ Blok, Vossius and his Circle, 387-388.

¹⁶ Ibid., 34-35, nn. 40 and 41.

¹⁷ Tolmer, Pierre-Daniel Huet, 213.

In the spring of 1659 Huet responded to Vossius' comments on Mela. Between March 1659 and September 1660, they exchanged at least five letters concerning the observations on Mela. 18 Rather than the abundant philological commentaries, Huet singled out Vossius' comment on the remarkable sight of the sunrise on mount Ida. In his first letter Huet briefly examined a geographical passage later in the commentary, but the main part of the letter as well as the further correspondence focused on Vossius' optical claims. Huet responded to the three central points in Vossius' argument: the nature of the atmosphere, the properties of atmospheric refraction and the nature of refraction. One senses the traces of surprize over Vossius' wilful deviation from optical authorities. Huet pointed out, for example, that Johannes Kepler, in addition to Tycho, had discussed the effects of the atmosphere during eclipses and showed that the atmosphere was not homogeneous. 19 At other places Huet likewise subtly pointed out additional issues and insights in the works of Witelo, Kepler, Christoph Scheiner and others, which his friend seemed to have missed. Still, he did not just bring forward his reading but also examined the argument in detail and on equal terms. That is, Huet discussed Vossius' account of the phenomena and his explanation.

Turning to the explanandum, Huet first rephrased the problem (fig. 2). Whereas Vossius had described the phenomenon in terms of lines of *sight*, Huet did so in terms of lines of light. In other words, rays of light: if B in the plain does not see the sun on the horizon in C while A on the mountain does see it, A must, he wrote, see the sun along a different ray, a ray that does not reach B. A ray FD of the sun's light that is refracted at D

¹⁸ Huet to Vossius, 4 March 1659 (original AUB, Ms. RK III E. 9, no. 214; copies: LUB, Ms. Bur. F 11-I, fols 369°–371° and Ms. Bur. Q 22:2, fols 244°–248°; the latter is less complete and the diagrams are less precise); Vossius to Huet, 14 August 1659 (copy LUB, Ms. Bur. Q 22:2, fols 249°–254°; AUB, D. 73 b is a rough transcript); Huet to Vossius, 6 February 1660 (original AUB, Ms. RK III E. 9, no. 237; copies LUB, Ms. Bur. F 11-II, fols 380°–382° and Ms. Bur. Q 22:2, fols 255°–259°); Vossius to Huet, 4 May 1660 (original LUB, Ms. BPL 885; copies LUB, Ms. Bur. Q 22:2, fols 260°–263° and a sloppy transcription AUB, Ms. D. 73 a); Huet to Vossius, 12 September 1660 (copy LUB, Ms. Bur. Q 22:2, fols 264°–267°). Note that the transcriptions in Ms. Bur. Q 22:2 often differ substantially from the originals and from LUB, Ms. Bur. F 11. This correspondence has received little to no attention until now. Tolmer, *Pierre-Daniel Huet*, 213–214, refers to the letter of 4 March 1659, but he only discusses the opening paragraph and, briefly, Huet's response regarding the effects of eclipses. The correspondence is mentioned in *OCCH* XIX, 392–393; 685–686. The editors point out the existence of a series of letters in Paris, but they only discuss very briefly the one letter in LUB, Ms. BPL 885. They do seem to have been aware of the Burmannus transcripts in LUB.

¹⁹ Huet to Vossius, 4 March 1659 (AUB, Ms. RK III E. 9, no. 214, fol. 2^r, LUB, Ms. Bur. F 11-I, fols 370^r–370^v).

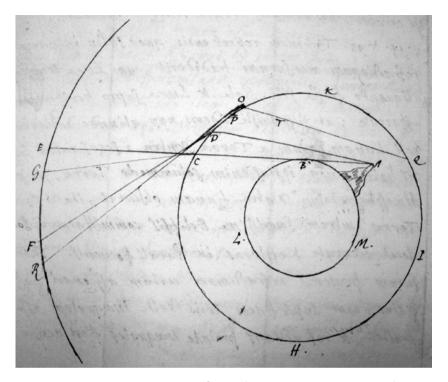


Fig. 2. Huet to Vossius, 4 March 1659 (AUB, Ms. RK III E. 9, no. 214).

towards A, does indeed pass above observer B.²⁰ While the sun slowly rises, A sees the said fires in the region PD, but B does not see the sun until it reaches G. The more obliquely the incidence of a ray, Huet explained, the larger its refraction. Huet did not calculate angles of refraction exactly nor did he consider bundles of rays of the sun's light from, for example, F, in order to see in what directions they would be refracted. Modern readers may expect something of the kind, along the lines of the teachings of Kepler's *Paralipomena*. Yet, we must realize that Kepler's optics was far from widely accepted at the time and that a Keplerian analysis in terms of focusing bundles of rays was not common practice. By considering single rays Huet simply applied the common optical rules as found in the teachings of Alhacen and Witelo. Here he would also find an account of the refracting properties of a burning sphere (fig. 3). It displays phenomena

 $^{^{20}}$ Huet to Vossius, 4 March 1659 (AUB, Ms. RK III E. 9, no. 214 fol. 3 $^{\rm r}$; LUB, Ms. Bur. F 11-I, fol. 370 $^{\rm v}$; this transcription has some errors on the page).

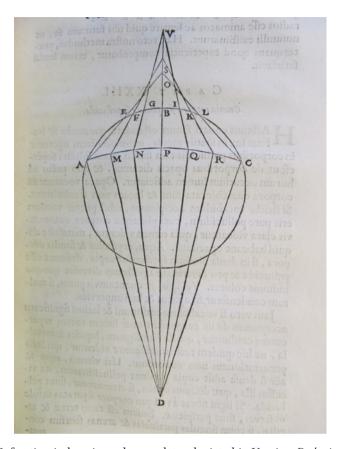


Fig. 3. Refraction in burning sphere as later depicted in Vossius, *De lucis natura*, page 57.

similar to the ones Huet appealed to: parallel rays cross after refraction. In his letter of 4 May 1660, Vossius explicitly referred to the properties of burning spheres. 21

Still, Huet presented a more fundamental objection to Vossius' account, namely his understanding of the nature of refraction. When claiming that refraction does not occur solely at the surface of a medium, Huet wrote, 'you challenge a major proposition' uniformly accepted by men

 $^{^{21}}$ Vossius to Huet, 4 May 1660 (LUB, Ms. BPL 885, fol. 2°). He returned to it in *De lucis natura*, chapter XXII, 56–58.

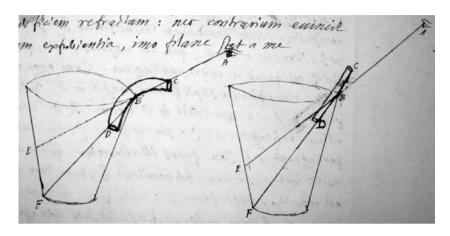


Fig. 4. Huet to Vossius, 4 March 1659 (AUB, Ms. RK III E. 9, no. 214).

knowledgeable in optics.²² He did not fully understand Vossius' observation through a tube immersed in water and therefore offered a detailed account (fig. 4). A bent tube DBC immersed in a glass of water, will not obstruct a ray from F, refracted at B to the eye A. A straight tube will, however, and in this case the eye will not perceive an image at E. A man of Vossius' discernment could not but sustain this, Huet concluded rhetorically.²³

Vossius did not give in (fig. 5). According to him, Huet's reasoning rested upon a supposition that was commonly held by opticians, but that was actually wrong. When a ray DB is refracted towards BA, the eye A was said to perceive D at the intersection of the refracted ray BA and line DF perpendicular to the refracting surface. This could not be the case according to Vossius, for then the image would be perceived through the rim of the tube. Consequently, the image should come to the eye along a different route. According to Vossius the image rose through the tube to the eye as a result of the refracting properties of the water in the immersed part of the tube.²⁴ Vossius' claim is difficult to understand in terms of modern ray optics because he reasoned in terms of the then standard optics of Witelo

 $^{^{22}}$ Huet to Vossius, 4 March 1659: 'tu maiorem impugnas, quae certo tamen certior est ex constantissima opticorum omnium opinione' (AUB, Ms. RK III E. 9, no. 214, fol. 3°); phrased differently in LUB, Ms. Bur. F 11-II, fol. 370°: 'Tu maiorem impugnas propositionem, quae certissima tamen est, ex constanti eorum omnium sententia, quae optices peritissimi habiti sunt'.

Huet to Vossius, 4 March 1659 (AUB, Ms. RK III E. 9, no. 214, fol. 4^r).

²⁴ Vossius to Huet, 14 August 1659 (LUB, Ms. Bur. Q22:2, fol. 253^r).

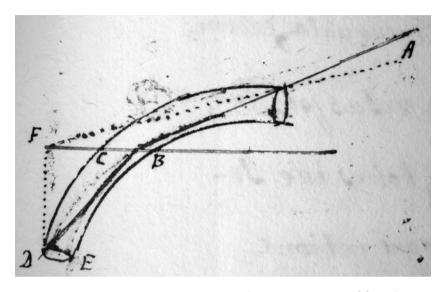


Fig. 5. Vossius to Huet, 14 August 1659 (LUB, Ms. Bur Q22:2, fol. 253^r).

and Alhacen which was essentially a theory of perception. To comprehend his argument one has to make a switch from the propagation of light rays to the geometry of perceived images. The rule Vossius referred to and which he dismissed – is known as the cathetus rule and was indeed foundational in geometrical optics. The cathetus rule states that the image of an object is located at the intersection of the line of sight and the perpendicular from the object to the surface of refraction (or reflection). In his *Paralipomena*, Kepler had shown by analysing focusing bundles of rays that this was not generally valid and that the place of the image was to be constructed differently, but that bears no direct relevance to the discussion at hand. Both Vossius and Huet conceived of optical imagery in terms of single rays as was wont in classical, perspectivist optics.²⁵ Vossius was on to a fundamental error in the learning of optics, or so he believed. In their abstractions by means of rays of light, opticians neglected the essential task of optics – to explain the perception of objects – and constructed images in places where they could not possibly be seen because they overlooked concrete, physical obstructions.

 $^{^{25}}$ Shapiro, 'The $Optical\ Lectures',$ 119–130; Malet, 'Keplerian Illusions'; Dijksterhuis, Lenses and Waves, 26–41.

His argument fed directly back into the issue at stake, the mount Ida observation. Huet, Vossius explained, had not yet fully grasped the essence of the problem of the mount Ida observation. The amazing thing is not that A sees the first flashes of the sun in D, but that they are seen in C, in exactly the same direction as B [is looking], whereas B does not see anything along the line BC. This could only be explained by properties of refraction in the atmosphere that carried the image of the sun from C, over the head of B, to A.²⁶ This cannot be caused by reflections at the border of the atmosphere, but must be the result of the interaction between light and the medium of the atmosphere. Huet, in his turn, was not convinced by Vossius' reasoning. According to him, Vossius basically misunderstood the nature of refraction. But Vossius maintained his opinion, retorting in yet fuller detail on the phenomena of refraction (figs. 6a–6b). Moving a candle from E to F, the eye D perceives glimmers at point B, which Vossius thought to confirm his conception of refraction.²⁷ Not so, Huet replied, the perceptions are caused by the curved rim of the surface of the water.28

With this the discussion apparently ended. In retrospect we may conclude that Vossius and Huet were peers and their ideas were comparable in several respects. They shared their basic conception of optics, being the study of visual perceptions by means of rays of light. At most Vossius was a bit more radical in applying this conception. They shared a basic conception of explanandum and explanans: a specific phenomenon that ought to be explained in terms of basic ideas about the nature of things, substantiating their claims by simple experiments. In this case, they tried to find an explanation for the curious Ida observation in terms of the refraction of light rays and would not resort to 'idle fancies' of atmospheric vapours, reflections, and the like. It is interesting to see that Huet zoomed in on Vossius' optical passages. The Mela-commentary contained a wealth of philological issues, but Huet chose this particular one to respond to Vossius. In so doing, he joined in with the turn in his friend's scholarship to specific topics. Indeed, Huet's scholarship underwent a similar development, increasingly focusing on natural philosophical topics and passionately criticizing Descartes. This development took shape in the late 1650s, after Vossius' and Huet's return from Stockholm.

²⁶ Vossius to Huet, 14 August 1659 (copy LUB, Ms. Bur. Q 22:2, fol. 251^v).

²⁷ Vossius to Huet, 4 May 1660 (LUB, Ms. BPL 885, fol. 3^r).

²⁸ Huet to Vossius, 12 September 1660 (LUB, Ms. Bur. Q 22:2, fol. 266°).

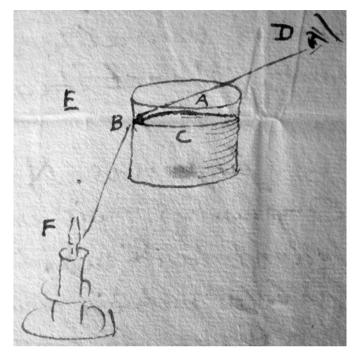


Fig. 6a. Vossius to Huet, 4 May 1660 (LUB, Ms. BPL 885, fol. 3^r).

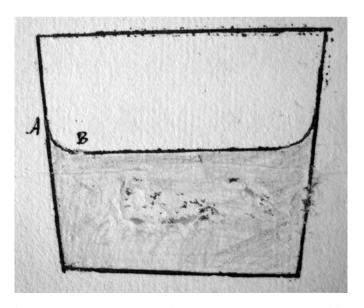


Fig. 6b. Huet to Vossius, 12 September 1660 (LUB, Ms. Bur Q22:2, fol. $266^{\rm r}$).

Snellius to the Rescue

In 1662 *De lucis natura* was published by the Elzeviers in Amsterdam. The book can be read as a sustained reply to Huet, in which Vossius explicated the arguments from their correspondence in detail and elaborated his underlying ideas about light and refraction. Vossius had found support for his opinions from an unexpected source. He had come across a manuscript by the erstwhile Leiden professor of mathematics Willebrord Snellius. The work confirmed his ideas about the nature and properties of refraction. In *De lucis natura*, Vossius wrote that Snellius' son had allowed him access to the documents during the previous winter.²⁹ The dedication of *De lucis natura* – to Karl I Ludwig, the Elector Palatine – is dated 1661, so we may assume Vossius had studied Snellius' manuscript in the winter of 1660–1661, shortly after his discussions with Huet.

Immediately after referring to his Mela edition, Vossius introduced Snellius, 'whose unique judgement confirms ours'. 30 This passage in De lucis natura has become Vossius' claim to fame in the history of optics, for he made public for the first time that Snellius had discovered the law of refraction prior to Descartes. This fact had been known earlier: no other than Vossius' teacher Jacob Golius (1596-1667) had discovered it in Snellius' papers and communicated it to Marin Mersenne (1588–1648) and Constantijn Huygens (1596–1687). But the news remained confined to private circles. The Snellius-manuscript which was seen by Golius, Vossius, and probably later on by Christiaan Huygens, has gone missing, but in 1935 Cornelis de Waard found and edited a manuscript by Snellius which contained a kind of table of contents of his optics.³¹ In 2000 Klaus Hentschel made a brilliant reconstruction of the way in which Snellius may have discovered the sine law.³² It agrees neatly with Vossius' account of Snellius' theory and makes clear how it confirmed Vossius' argument in the Mela-commentary (fig. 7).

In Vossius' account of refraction, as well as in Hentschel's reconstruction of Snellius' discovery of the law of refraction, the 'refractaria' has a crucial part. 33 The 'refractaria' is the curve glqd generated when a straight

²⁹ 'Inter alia vera praeclara quae reliquit monumenta, supersunt quoque tres libri optici, quorum usuram superiori hyeme concessit mihi filius eius' (Vossius, *De lucis natura*, 36).

³⁰ '...praeterire non possum insignem Willebrordi Snellii observationem, quae unice sententiam nostram confirmat' (Ibid.).

³¹ De Waard, 'Le Manuscrit Perdu'.

³² Hentschel, 'Brechungsgesetz'.

³³ Ibid., 307.

After introducing Snellius and establishing the properties of refraction, Vossius turned to the discussion with Huet. In chapter XVIII he discussed atmospheric refraction, explaining how the constitution of the atmosphere causes a slight refraction and thus for things to be seen very far over the horizon. Vossius then turned to the experiment with the tube, which according to some he had not explained clearly enough.³⁶ In De lucis natura Vossius did not refer to Huet by name (fig. 8). It is clear, Vossius wrote, that a bent tube ADBCE is not penetrable to the eye, yet when it is immersed in water it will appear straight. 'The inner leg EC is namely refracted to EF. The outer leg DB is refracted to DG. But the opening BC will appear refracted into GF... Therefore the complete tube, perceived by eye A, becomes penetrable and appearing almost straight...'37 This passage may be difficult to grasp because it seems to conflate the effect of refraction on the image of the object with an effect on the object itself. Still, it is crucial to Vossius' understanding of refraction, in which the perception of images is central.

³⁴ Ibid., 304-307.

³⁵ Vossius, De lucis natura, 35.

³⁶ 'Quamvis hoc alibi monuerimus, quia tamen nonnulli non satis hoc a nobis demonstratum existimarunt, clarius aliquanto id ipsum hic proponemus' (Ibid., 44).

³⁷ 'Sit siphon curvus ABC; manifestum est hunc non esse oculis pervium si in aere teneatur. Idem vero si aquae immergatur usque ad superficiem DE statim fiet pervius, et cum revera curvus sit, tunc rectus videbitur. Crus enim interius EC refringitur in EF. Crus exterius DB refringitur in GD. Foramen vero BC refractum comparebit in GF mutata rotunda figura in ellipsin. Totus itaque tubus ab oculo A inspectus pervius fiet et propemodum rectus videbitur, idque tanto magis quanto obliquius immergatur' (Ibid., 44–45).

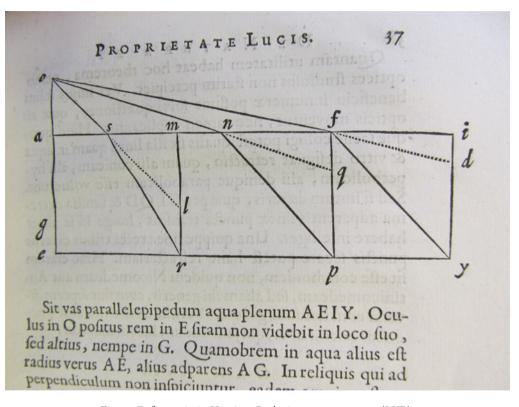


Fig. 7. Refractaria in Vossius, De lucis natura, page 37 (LUB).

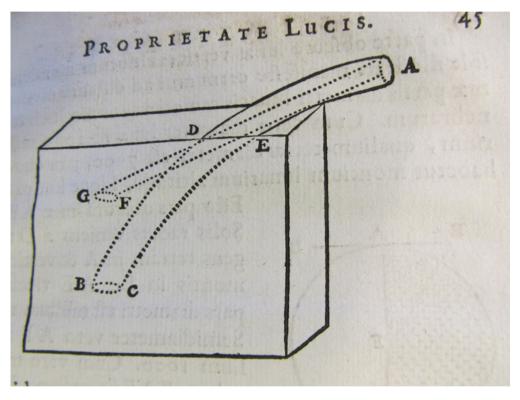


Fig. 8. Tube experiment in Vossius, *De lucis natura*, page 45 (LUB).

Vossius' argument makes clear that he conceived of refraction in terms of image formation rather than ray propagation. In *De lucis natura*, Vossius had the opportunity to elaborate his conception of light and refraction comprehensively. Thus the chapters in which he retook his discussion with Huet were preceded by an exposition of the nature of light and its interaction with matter. Light, Vossius maintained, is caused by fire and it is therefore incorporeal (chapters I–III). He forcefully opposed the opinions of Descartes and Gassendi (chapters IV-V). The motion of light is essentially a motion in vacuum, i.e. the absence of matter. Vossius explicitly admitted the existence of a vacuum beyond the earth's atmosphere (chapters VI-XIII). He reasoned the height of the atmosphere. Optical phenonema were now to be explained in terms of the interaction between light and matter. Vossius explained that the density of a corporeal body determined the optical effects observed and this led the argument to refraction (chapter XIV).38 From this line of reasoning naturally follows the idea that refraction occurs as a result of the interaction between light and a medium. Consequently, refraction does not occur at the surface of a refracting medium but is a continuous interaction between light and medium. And thus it follows that refraction also occurs, as we have seen. in the perpendicular ray (chapters XV-XVI). Vossius' optics, which had remained largely implicit in the remark in the Mela-commentary and in the discussion with Huet, constituted, in other words, a coherent system based on a specific conception of the nature of light.

The elaboration of his theory of light and refraction in *De lucis natura* also uncovers a more fundamental difference with Huet, one only touched upon in their correspondence. As we may recall, Vossius considered the error of mathematicians in optics to neglect its actual subject, perceptions. In Vossius' view, images are the result of the interaction of light and matter and perceptions should therefore be explained in such physical terms. In a way he criticized Huet and the old authorities in optics for thinking too mathematically. In the context of the history of early modern optics this is interesting, for it is expressly such a change towards considering the physics of light that marks the transition from medieval *perspectiva* to early physical optics.³⁹

³⁸ After the exposition on the nature of properties of refraction and his rebuttal of Huet, *De lucis natura* in fact returns to this line with an exposition of the nature of colours in chapters XXIV–XXIX. This is interesting in its own right because Vossius considered all colours to be existing in light. See MacLean, 'Kleurenopvatting', 223–225.

³⁹ Dijksterhuis, Lenses and Waves, 225-235.

The interaction between light and optical mediums became the central issue in explaining the nature and properties of light. Around 1630, Descartes, building upon an intuition of Kepler, explained refraction in terms of the resistance of a transparent medium on the propagation of the light's force. Vossius' optics addressed the very same issue of how to incorporate the physics of light and matter into optics, but he did so in a fundamentally other way than Kepler and Descartes. Whereas the latter rethought optics in terms of disembodied light and the physical properties of light rays, Vossius did so in terms of the perception of images. In retrospect Snellius had been acting along similar lines, rigorously considering the 'refractaria' in terms of images produced in a transparent medium. Vossius – and Snellius – maintained the core of medieval perspectiva of being a theory of *sight*, whereas Kepler and Descartes transformed optics into a theory of *light*.

The Snellius-manuscripts supported Vossius in countering Huet's criticisms. I thus give a somewhat different reading of Vossius' disclosure of Snellius' discovery, which is usually presented as being motivated by his anti-Cartesianism. I would say that the opportunity it provided to challenge Descartes was secondary. But Vossius did not have to think twice to seize it. *La Dioptrique* (1637) was an essay of Descartes' new natural philosophy and he presented the law of refraction as a discovery that was the fruit of his ontological and methodological doctrines. The law of refraction was thus an important argument for the power and the validity of Descartes' natural philosophy. It had yielded the solution to a puzzle which had been haunting opticians since antiquity: the true measure of refractions.⁴² The Snellius-manuscript now showed that mechanical philosophy was no prerequisite for deriving the law of refraction. And Snellius' way of thinking perfectly agreed with Vossius' conception of light and its properties.

Descartes' optics posed a different challenge than Huet had presented. Snellius' analysis of the refractaria enabled Vossius to substantiate his argument that refraction was a phenomenon of medium and not merely of surface. This was mainly a matter of optics in the traditional sense of considering the behaviour of rays – the *path* of light. To counter Descartes'

⁴⁰ Schuster, 'Descartes opticien', 279-285.

⁴¹ Smith, Descartes' Theory of Light, 32-46.

⁴² Le Monde, ou Traité de la Lumiere was published as late 1664, so Vossius knew only Descartes' essays and *Principia Philosophiae* (1644). See also Thijssen-Schoute, *Nederlands Cartesianisme*, 611.

optical doctrines Vossius had to deploy his own natural philosophical ideas about the nature of light and matter – the *substance* of light. Besides showing that Descartes' natural philosophical doctrine was not imperative to arrive at the law of refraction, Vossius elaborately argued that its principles were faulty. He not only opposed Descartes' conception of the substance of light, but also his methods. As in the Mela-comment, he proposed explanations that in his view related directly to the phenomena, without recourse to supplementary hypotheses. In this way, Vossius attacked Descartes' optics across its whole natural philosophical width. In fact, Descartes' derivation of the sine law had already come under attack when the critique and alternative derivation by Pierre de Fermat (1601–1665) became known in 1657.⁴³ Vossius' publication of Snellius' achievements added fuel to the objections many had to Descartes' explanation of refraction, as can be seen in the case of Christiaan Huygens.⁴⁴

Readers of De lucis natura

Huygens was a close acquaintance of Vossius and in many respects comparable to him. He too was the son of a prominent man of letters: diplomat, poet and go-between par excellence Constantijn Huygens. He too had been somewhat of a prodigy. By 1660 both Christiaan Huygens and Isaac Vossius had established a solid scholarly reputation. After Vossius had settled in The Hague in 1655 the two saw each other regularly and were well informed of each other's work. Their circles, particularly in France, overlapped to a large extent and they often acted as intermediary towards mutual acquaintances. And Huygens too was critical of Descartes, in particular regarding his explanations of natural phenomena.⁴⁵

Still, Huygens was chiefly condescending about Vossius' optics. In August 1659 he sent Ismael Boulliau (1605–1694) ten copies of his book on Saturn, to be distributed among his French acquaintances. Among them was Huet, whom he knew to be a learned person, 'particularly because he has recently objected to mister Vossius, who has advanced strange things

⁴³ Mahoney, *Pierre de Fermat*, 375–390. The debate was discussed in Huet's circles as well, Tolmer, *Pierre-Daniel Huet*, 209–212.

⁴⁴ Dijksterhuis, Lenses and Waves, 109-112.

 $^{^{45}}$ On reading and commenting Baillet's biography of Descartes, Huygens recollected how he had been impressed by Descartes' ideas as a young boy but later found much to object to them; OCCH X, $_{403}$ – $_{406}$. See also the contribution by Eric Jorink in the present volume, above, 121.

in his commentaries on Pomponius Mela, touching refraction. He has censured him very properly, as certainly our Vossius at that point is *totus alienus et absurdus*'. ⁴⁶ Vossius himself was also on the list of addressees whom Huygens sent a copy.

When De lucis natura appeared in June 1662 it made something of a splash in Dutch circles. Nicolaas Heinsius (1620–1681) wrote to Huvgens expectingly, Johan de Witt (1625–1672) read it and wrote Vossius a lengthy letter in response.⁴⁷ Optical matters also entered a disputation that Nicolaas Witsen (1641–1717) delivered at the Amsterdam Athenaeum on April 1 1662. The disputation discussed the nature and meaning of comets under the title *Prognostikon*.⁴⁸ It was dedicated to 'the incomparable philosopher and mathematician' Johannes Hudde (1628–1704), who was also a cousin of his. In this way, Witsen's disputation testifies to the broader interest in Dutch circles in the new philosophy, which is further confirmed by a series of 46 additional theses on various matters of astronomy, mathematics, alchemy et cetera. These theses relate to ongoing discussions of Cartesian ideas, including the nature and properties of light. Although the latter do not explicitly refer to Vossian opinions, some of them concern the same issues: the properties of shadows cast by the sun on the earth (I), the height and nature of the atmosphere (III), visibility behind the horizon (XXIX). Vossius' optics was part of ongoing discussions about the new philosophy among the Dutch circles of savants that included many of his acquaintances. Witsen himself was a close friend until they clashed in the 1670s after Vossius had misrepresented Witsen's geography of Nova Zembla in a paper published in the *Philosophical Transactions*.⁴⁹

Huygens acted as an intermediary to distribute *De lucis natura* in Europe. Ismael Boulliau returned three copies of his own 1638 optics

⁴⁶ Huygens to Boulliau, 7 August 1659: '... Monsieur Huet, lequel je connois des long temps estre une personne tres docte et curieuse, et particulierement par ce qu'il a objectè dernierement a Monsieur Vossius; le quel ayant avancè des choses estranges dans ses commentaires sur Pomponius Mela, touchant la refraction, il l'a censurè tres a propos, car certainement nostre Vossius en cet endroit totus alienus est et absurdus, et ce qui est le pis, incapable de recevoir meilleure instruction' (*OCCH* II, 454).

⁴⁷ Heinsius to Huygens, 30 May 1662; Huygens to Lodewijk Huygens, 22 June 1662; Huygens to Heinsius, 26 June 1662 (*OCCH* IV, 143, 158–159; 163). In these letters De Witt's response is mentioned; the actual letter is unknown. Consequently we do not know the details of De Witt's critique.

 $^{^{48}}$ Witsen, ΠΡΟΓΝΩΣΤΙΚΟΝ. See Jorink, Reading the Book of Nature, 148–149; Van Miert, Humanism in an Age of Science, 262; Peters, Wijze koopman, 18–19.

⁴⁹ Peters, *Wijze koopman*, 82–83. See also the contributions in this volume by Eric Jorink (153, n. 148) and Karel Davids (196, 203, n. 63).

for Huygens, Vossius and Hudde.⁵⁰ And Huygens himself? He only said that it was 'full of paradoxes' and that it contained a doctrine of refraction totally different than his own.⁵¹ Whether Huygens discussed *De lucis natura* with Vossius is undocumented, but he never bothered to explicate his objections to Vossius' doctrine in writing.⁵² Huygens was a true master of Keplerian optics, having taken it much farther than Descartes in his analysis of lenses, but he evidently did not think it worth the effort to edify Vossius.

At the same time, Huygens was amused with the fuss that was made over *De lucis natura*, in particular 'those Cartesians who show to have great envy to refute it'.⁵³ Besides De Witt, whose objections are unknown, the Utrecht professor Johannes de Bruyn (1620–1675) wrote a lengthy letter refuting *De lucis natura*, defending the Cartesian doctrine.⁵⁴ Of course De Bruyn objected to Vossius' idea that light was immaterial, but he discussed the nature of refraction in particular detail. He explained that the deviation of a refracted ray was constant – and thus refraction was a surface phenomenon – and that the apparent rise of images was a secondary effect. One should take into account all rays reaching the eye. Considering the rays that passed the outer edge of the pupil, he explained how a single eye perceived depth and thus an apparent foreshortening of images.⁵⁵ De Bruyn proved himself a worthy disciple of Descartes, applying Keplerian analysis of ray tracing to the phenomena put forward by Vossius.

Vossius was not convinced by De Bruyn's refutation. In reply he once again explained his ideas about the perceptual effects of refraction. He did so in a treatise published the same year with Adriaan Vlacq in The

⁵⁰ Boulliau to Huygens, 8 August 1662 (OCCH IV, 191). Boulliau's De natura lucis (Paris, 1638) was anti-atomistic and was based on a Keplerian, mathematical ontology in which light was conceived as a three-dimensional substance (rather than Kepler's two-dimensional expanding surface). Boulliau said that the light's substance was the mean proportional between corporeal and incorporeal, which Descartes read as 'mean proportional of substance and accident'. See Hatch, 'Coherence, Correspondence and Choice'.

⁵¹ Huygens to Moray, 9 June 1662 (OCCH IV, 149).

⁵² Huygens developed an account of atmospheric refraction in chapter 4 of *Traité de la Lumière* (1690) in which light rays follow a curved path. This looks like Vossius' claims, but Huygens arrived at this in a fully different way. He considered the physics of light propagation through an inhomogeneous medium.

⁵³ Huygens to Lodewijk Huygens (*OCCH* IV, 158–159).

⁵⁴ The letter is dated 10 February 1663, and was published at the Elseviers of Amsterdam as De Bruyn, *Epistola*. On De Bruyn see Scheib, 'Bruyn'.

⁵⁵ De Bruyn, *Epistola*, 43–49.

Hague.⁵⁶ It also contained his response to a work by someone else, De ianis et lucis natura exercitationes, ad. Is. Vossium, published in Paris in 1663 by Pierre Petit (1617–1687). Petit was a physician who had written on medicine and was turning himself into a man of letters. In 1661 he published a discourse on tears, *De lacrymis*, that has been characterised as an erudite synthesis of philological scholarship and anatomical research.⁵⁷ He attended meetings of the Académie Montmor and was listed in 1662 by the influential Jean Chapelain (1595–1674) as a notable scholar.⁵⁸ Petit was a fierce anti-Cartesian and defended peripatetic doctrines. For his part Descartes could get lost, he wrote in *De lacrymis*. ⁵⁹ Petit's objections were mainly aimed at Vossius' ideas concerning the nature of light and fire, and questioned the way fire might affect the soul. Vossius, in turn, was also no Cartesian, but he was not an Aristotelian either. In his view he had gained a novel insight in the understanding of visual perception that exceeded conceptual differences between ancients and moderns. Vossius responded to his critics point by point, but they had not in any way changed his opinion.

Huet was alarmed when he heard of the publication of *De lucis natura*: the ingratiations in his letters to Vossius disappeared. Vossius, he said, retained his old habits: he doted on paradoxes, he was deaf to all arguments and seemingly wanted to have supremacy in all disciplines. Huet compared him to Joseph Scaliger, who had engaged in the 1590s in a debate about the quadrature of the circle without paying much respect to mathematical tradition. Huet said that Vossius only wrote on light to shake the foundations of optics.⁶⁰ This time Huet remained silent, but his savant circle did not. Huet's close acquaintance André Graindorge (1616–1676) did respond. They were both from Caen and in 1666 founded

 $^{^{56}}$ Vossius, *Responsum ad objecta*. It contains a reference, on page 33, to De Witt, regarding the shape of the refractaria, that may have been occasioned by his objections to *De lucis natura*.

⁵⁷ Schrijvers, Sunt lacrimae rerum.

⁵⁸ Tolmer, *Pierre-Daniel Huet*, 274. Chapelain also mentions Huet, Du Hamel, De la Chambre, Emmanuel Maignan, and the 'physicien' Petit. Note that the Pierre Petit who wrote against Vossius is not to be mistaken with the 'intendant de fortifications' Pierre Petit, a mathematician who wrote a *Dissertation sur la nature des comètes* (1665) and who moved in the same intellectual circles as Christiaan Huygens and Isaac Vossius; see for example *OBI* IV, 173; Petit to Christiaan Huygens, 17 October 1664, *OCCH* V, 123–126. The latter Petit send a copy of his *Dissertation* to Vossius, who was very interested in comets; Petit to Christiaan Huygens, 23 January 1665, *OCCH* V, 206–208.

⁵⁹ 'Facessat Cartesius' (Schrijvers, Sunt lacrimae rerum, 4–5, n. 8).

⁶⁰ Tolmer, Pierre-Daniel Huet, 281.

the local Académie de Physique. In 1664 Graindorge published *De natura ignis, lucis et colorum dissertatio*, directly reacting to *De lucis natura* as well as its critics. I do not know why Descartes is defended by De Bruyn, Aristotle by Petit', Graindorge declared in the dedication. He used the best method, founded on reason and experience, investigating what nature dictates, rather than what philosophers thought. Graindorge developed a methodical critique of Vossius' conception of light, focusing on the latter's comparison of light and fire. Fire, according to Graindorge, exists in itself and light is spirit. Graindorge too was surprized by Vossius' claim that refraction is an effect of the medium, rather than of its surface. At Yet, contrary to previous critics, he was sympathetic towards Vossius' discussion of images. He offered a specification, in which he explained that an image is not raised along the cathetus but along an arc around the point of refraction. Graindorge certainly was not a mouthpiece of Huet, for their approach to optics hardly squared.

In 1666 Vossius published his last statement of his theory of light and refraction, 'Appendix ad scriptum de natura et proprietate lucis'. 66 It was an appendix to his book on rivers, *De Nili et aliorum fluminum origine*. It marked the end debate, for no one took up the pen after its publication. *De Nili origine* itself was a reply to the book about the Nile by Marin Cureau de la Chambre (1594–1669). This Paris physician had written on optics too, in *La Lumière* (1657), but Vossius did not address De la Chambre's ideas on light. In the 'Appendix de natura lucis' he replied to the most important objections that had been raised against his optical ideas in order to explain points of his argument that may have been unclear to his readers. He first amplified on the substance of spirit and fire, the existence of atoms and then further clarified his ideas about the perception of images. In the fourth chapter he corrected Graindorge, by giving a precise description of the refractaria (fig. 9a). and then returned to the question how objects are perceived through the air. He constructed the

 $^{^{61}}$ 'An eodem eventu quo Bruynus Cartesium tuetur, Aristotelem Petitus, nescio' (Graindorge, Dissertatio, 6).

 $^{^{62}}$ 'Ego vero nec novandi prurigine incensus, nec antiquitati superstitiosa veneratione addictus, tutam semper ac securam putavi eam methodum, quae experimentis et ratione innixa, non quid sentiat Aristoteles, aut Cartesius, aut Gassendus, sed quid dictet ipsa rerum natura, perquirit et investigat' (Graindorge, *Dissertatio*, 5).

⁶³ Graindorge, Dissertatio, animadversiones I–X.

⁶⁴ Ibid., 61.

⁶⁵ Ibid., 67-78.

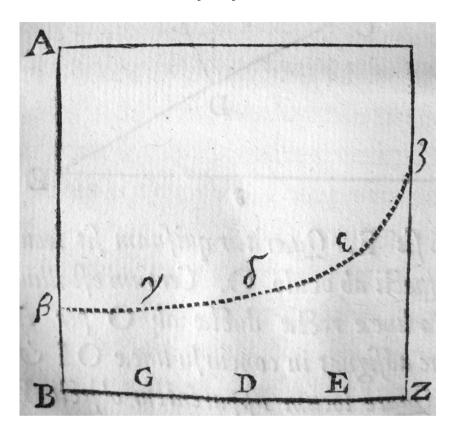
⁶⁶ Vossius, De Nili origine, 79–173.

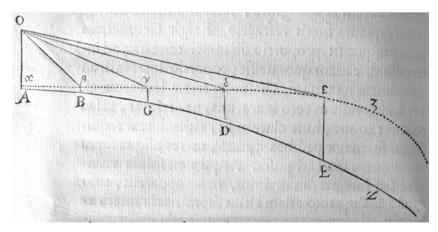
place where points of the Earth's surface are perceived from a viewpoint high above the surface of the earth (fig. 9b) up to the visual boundary. So Vossius' optics was back where it had started: the observations of phenomena of atmospheric refraction. And by including it in his river book, it literally was back where it had started: geography.

The Learned Optician

Optics was not Vossius' lifework, it was merely one part of his broad scholarship. During the eight years between 1658 and 1666 he had inspiredly developed and discussed his opinions. After publication of the 'Appendix de natura lucis', optics more or less returned to the background. Vossius' optics was read and taken seriously by a range of scholars. Considering the people who took the trouble to enter into a discussion with Vossius, it turns out that a particular group of scholars engaged with him on the topic. His main collocutors were linked to the Paris savant circles of Montmor and – later – Thévenot, circles that Vossius frequented himself. In the second place, there were collocutors who simply shared Vossius' interest: they were appealed by the same kind of questions he raised and the same kind of answers he put forward. In Vossius' approach to natural philosophy, conceptual analysis and empirical consideration were prominent. This kind of natural philosophy figured prominently in the Parisian societies, but dit not appeal to someone like Huygens, who preferred the 'nuove scienze' in the Galilean spirit, and was to prefer the section of 'mathématique' of the Académie Royale over the section of 'physique'.67 To say that Vossius appealed to a specific group of kindred spirits is also to say that these circles offered a fertile breeding ground for his scholarship. As we have seen, his optics developed to a considerable extent from his discussions with fellow savants. In particular, De lucis natura was the result of Vossius' correspondence with Huet over the Mela-commentary, after Snellius' manuscript had turned up as an expedient authority. Following the courtly – and archival – type of scholarship Vossius had pursued until the 1650s, the move to The Hague brought a change of milieu and a change of learning. In other words, Vossius' learning during his sojourn in The Hague fitted the interests and approaches of the savant societies that surrounded him.

⁶⁷ Dijksterhuis, Lenses and Waves, 247-249.





Figs. 9a–9b. Refractaria and vision through the atmosphere in Vossius, 'Appendix ad scriptum de natura lucis' (in: *De Nili origine*) pages 107 and 124 (LUB).

Vossius' interactions with French savants are substantially documented in his correspondence, but in the Low Counties, he was also surrounded by a circle of 'liefhebbers' (*curieux* or *virtuosi*). Without going into the details – see Jorink's contribution to the present volume – it is clear that he found kindred spirits in the somewhat heterodox circles of urban Holland. His near neighbour Huygens may not have taken the trouble to put his pen to paper to react to his natural philosophy, but he certainly appreciated his material pursuits in optics. Vossius had a collection of instruments, including a good telescope and a microscope. ⁶⁸ In Amsterdam, Johannes Hudde was an enthusiast of optical instruments, too, and he involved Vossius in his interests for example when he went to local glassfurnaces to enquire into the production of glass-beads. ⁶⁹ Unfortunately, interactions like these are only documented in third-party reports, which makes it difficult to assess how exactly Vossius' Dutch connections affected his optics – and his scholarship at that time in general.

A valuable source of Vossius' interactions in Dutch savant circles is the *Journal des Voyages* of Balthasar de Monconys (ca. 1611–1665). It draws our attention to Vossius' interest in instruments and material inquiries that his publications scarcely reveal. Monconys met Vossius on 13 August, 1663. Together they travelled to The Hague and discussed all kinds of topics of natural inquiry and curiosity.⁷⁰ In particular, Vossius offered his opinions on Monconys' marot, the curious tears of glass that exhibited inexplicable properties (fig. 10) These tiny drops of solid glass can be hammered hard without breaking, but when the tip is broken they instantaneously dissolve into dust.⁷¹ Vossius explained how heat is confined in the glass by the sudden cooling when a drop of glass falls into cold water.⁷² Monconys had been collecting experimental accounts and explanations of this phenomenon everywhere he went, in London at the Royal Society and from Hobbes, in Paris at Montmor's, and so on. He was much impressed by Vossius' account and preferred it over many others.⁷³ Monconys must

⁶⁸ Monconys, Journal des Voyages, 153-154.

⁶⁹ Ibid., 177–179. On Hudde see Vermij, 'Bijdragen'; Vermij and Atzema. 'Specilla circularia'.

 $^{^{70}}$ Monconys, *Journal des Voyages*, 150–155. See also the contribution by Eric Jorink earlier in this volume, above, 120–121.

⁷¹ For the history of these 'larmes' see Brodley et al., 'Prince Rupert's Drops'. Note however that this too is somewhat biased towards the English and French contexts, as is the case in the histories of (simple) microscopes.

⁷² Monconys, *Journal des Voyages*, 152–153.

⁷³ Ibid., 25; 162–169. No other than Huet also gave an account of the 'larmes', but he never published it; see Tolmer, *Pierre-Daniel Huet*, 236, 240. Justel wrote Oldenburg on 28

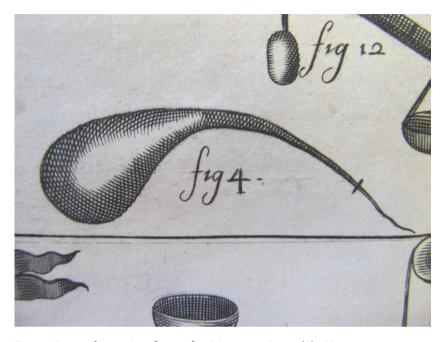


Fig. 10. 'Larme de verre', as depicted in Monconys, *Journal des Voyages*, accompanying page 42 (LUB).

have valued Vossius' optics highly, for in Amsterdam he bought no less than fifteen copies of *De lucis natura*.⁷⁴

Monconys was not alone in his esteem for Vossius. Together with Huygens, Vossius was among the savants that Jean-Baptiste Colbert chose to award a 'gratification' from the French king.⁷⁵ In a letter of March 1669 Henry Oldenburg listed Vossius among the leading philosophers of the day, next to Descartes, Gassendi, Boyle, Huygens, Hooke, and others.⁷⁶ When Vossius moved to London, he was well received in the circles of the Royal Society. At the request of Oldenburg, Vossius submitted two experimental discourses, one on Archimedean mirrors and one on the

november 1668 that Vossius had written a Latin tract on the 'larmes' (*CHO* V, 207–209). I have not found a trace of it, but further inquiries would be worth the effort.

⁷⁴ Monconys, *Journal des Voyages*, 176.

⁷⁵ See for example *OCCH* IV, 391; 407. See Eric Jorink's contribution, above, 142, and Karel David's, below, 199.

⁷⁶ CHO V, 423.

moon's *maculae*. They were read at the meeting of 4 March 1675, and commented upon by Hooke.⁷⁷ Vossius was still a respected optician.

Conclusion

We may be surprized to encounter a Vossius among the protagonists of the scientific revolution. In standard accounts of the history of seventeenth-century science – and of optics in particular – Vossius is a footnote at most, and then only because of his publication of Snellius' discovery of the law of refraction. His optical doctrines are usually marginilized as being already out of date at the time when they were put to paper. This is mainly the result of preoccupations of historians of science who like to trace early forms of mathematical physics in seventeenth-century thought. In order to properly locate Vossius in the intellectual landscape of seventeenth-century learning, a change of perspective on the scientific revolution is required. If I am allowed a cinematic expression, a Vertigo shot should be made. 78 We should roll back the camera and distance ourselves from our focus on 'science' in the seventeenth century, and at the same time zoom in on contemporary understandings of natural knowledge and inquiry. When talking about seventeenth-century scholarship, terms like 'science' are preferably avoided, because such conceptions can hardly do justice to the kind of learning pursued by men like Isaac Vossius. The dynamics of intellectual and inquisitive changes in seventeenth-century intellectual developments were not made according to some protoscientific agenda – at most this was a result thereof. The dynamics are to be found in the culturally established domain of natural inquiry, namely natural philosophy.⁷⁹ Within the context of the institutionalized agenda of inquiry of natural philosophy, questions, doubts, challenges were both raised and answered. For a proper understanding of the scientific revolution, the work of presumably marginal thinkers like Vossius should equally be taken into account.

 $^{^{77}\,}$ CHO XI, 203; 208–209. The exposition on the spots of the Moon, at least a variant of it, was published in Vossius, Variarum observationum liber, 195–200. Cf. Jorink, above, 149.

 $^{^{78}}$ In Vertigo (1958) Hitchcock visualizes the sensation of vertigo by filming a view down a deep shaft. The frame is constant but by simultaneously zooming in and dollying out a strong sense of depth is created.

⁷⁹ Schuster, 'Scientific Revolution'.

When the scientific revolution is understood as a revolution in natural philosophy, Vossius ends up right in the middle of it (as so many seventeenth-century protagonists of what we nowadays would call 'humanities'). In his optics, Vossius confronted the main issues at stake: the question of substance, cosmology, and, most importantly, the question of epistemology.80 In De lucis natura he systematically elaborated his natural philosophy, to a large extent in order to propose an alternative to Descartes. Compared to Vossius, Huygens was always the mathematician largely ignoring the main issues in natural philosophy, be it Cartesian, Gassendian, or any other brand.81 We find Vossius precisely on the breach between Renaissance and revolution, in which ancient authorities were increasingly held to the light of rational and empirical inquiry. In the Mela-commentary, Vossius did not judge textual sources on their ancient authority, but assessed their empirical and intellectual value for his description and analysis of optical phenomena. A text had become a fallible interpretation of reality that ought to be critically read, as were the accounts of natural phenomena. In this sense of textual criticism, the teachings of seventeenth-century philology equally applied to natural inquiry.82

In his optics, Vossius found himself dealing with the same questions as those which had been raised by Kepler, Descartes, and others. He investigated the physics of light and vision and raised topical questions in contemporary discourses of natural philosophy. His was a physics of perception that diverged from the Keplerian line that came to dominate seventeenth-century optics. This perceptual approach would return to the mainstream only in the physiological optics of the nineteenth century. Solvesius' line of inquiry, considering the physics of visual perception, may seem a dead end, as it did not fit in with the approach of the Huygenses and Newtons. Taking other marginalized students of early modern optics into account, suggests that a line of 'perceptual' optics continued through

 $^{^{80}}$ I leave out the question of causation, for Vossius did not substantially deal with this.

⁸¹ Dijksterhuis, Lenses and Waves, 237–249.

⁸² Dijksterhuis, 'Mutual Making'.

⁸³ Vossius' understanding of images resembles Goethe's in the *Farbenlehre*. Goethe himself was of course mainly interested in Vossius' conception of colors, which he discussed at length the historical part of the *Farbenlehre*, vol. IV, 230–238. 'Hier sehen wir also einige Jahre früher als Newton sich mit diesem Gegenstande beschäftigt, seine Lehre völlig ausgesprochen' (237).

the seventeenth and eighteenth centuries up to the physiological turn in optics of the nineteenth century.⁸⁴ How Vossius fits in with a broader history of early modern optics remains to be seen. In his own day he was a learned, if rather pretentious, optician.

⁸⁴ Dijksterhuis, 'Eye Sole Judge', 319–323.

IN THE SHADOW OF JESUITS: ISAAC VOSSIUS AND GEOGRAPHY

Karel Davids

All his life, Isaac Vossius strove to form a certain idea of the world. The first book he finished was an annotated edition and translation of ancient sailing directions for the Mediterranean, the Black Sea and the westcoast of Africa, the Periplus Scylacis Caryandensis. This work, which Vossius prepared when he was barely nineteen years old, appeared in 1639 in Amsterdam with the imprint of the Blaeu firm.1 Although a subsequent project on Ptolemy's Geographia, announced in the preface of the Periplus, never reached completion, Vossius went on to publish several works on geography in mid-career, namely Observationes ad Pomponium Melam de situ orbis (1658), De motu marium et ventorum liber (1663) and De Nili et aliorum fluminum origine (1666), and he included essays on geographical longitude and the northeast passage to Japan in his final collection of studies published in 1685, Variarum observationum liber.² His library, purchased after his death by the University of Leiden, comprised at least 25 atlasses and 187 loose maps.³ When Vossius in 1663 appeared on a list of recipients of allowances granted by King Louis XIV of France, he was, significantly, not characterized as 'orateur latin', 'savant ès lettres humaines' or 'habile pour l'histoire' but as 'excellent dans la géographie'.4

What exactly did Vossius do as a geographer? How and where did he get his ideas about the world? What was the audience he had in mind when publishing about this particular subject and how were his views received? These are the questions I would like to address in this article. The purpose of my essay is not to portray Vossius as a brilliant, yet sadly neglected geographer, but to understand the genesis and reception of his work as a geographer in its contemporary setting. In common with other humanist scholars, Vossius paired a propensity for meticulous study of

¹ Blok, 'Vossius and the Blaeus', 79.

² On Vossius plans to publish Ptolemy's *Geographia* see Vossius, *Periplus Scylacis Caryandensis*, 'Praefatio'.

³ De Vries, 'Atlases and Maps'.

 $^{^4}$ OCCH IV, 405–406, n. 9. See also the contribution by Eric Jorink in the present volume.

190 KAREL DAVIDS

texts and visual sources (like maps) with a vivid curiosity for the structure and workings of the natural world.⁵ From the 1650s onwards, this combination found, among other things, expression in his geographical works. These inquiries in the field of geography partly rested on his formidable command of classical sources, but were also based on digestion of varied information of more recent date, gathered notably by Catholic missionaries and servants of the Dutch East India Company (VOC), and were crowned with a mixture of scientific reasoning and speculation. At the end of the day, as I will show, Vossius' accomplishments fell short of his ambitions. As a geographer, his influence was more limited than he had wished and imagined for himself. In the conclusion of this essay, I will probe into the reasons why.

Vossius as a Geographer

Vossius' ventures into geography started as a philological exercise. The *Periplus Scylacis Caryandensis* was intended as a first proof of his abilities as a humanist scholar. The book was dedicated to his mentor and model, Claude Saumaise (1588–1653), who took an interest in geography himself and had actually lent Vossius a copy of an incomplete manuscript of a sailing direction of the Black Sea, found in Heidelberg, which was published in the second part of his work.⁶ The first part of the book consisted of an annotated edition and translation of a periplus ascribed to the Greek explorer Scylax of Caryanda, active in the sixth century BC, which was in all probability, as Vossius suspected, composed by a pretender living much later.⁷

The project on Ptolemy's *Geographia*, which Vossius started even before the edition of the *Periplus* was finished, was an altogether more ambitious one. In contrast to the relatively brief set of sailing directions written by pseudo-Scylax, which had appeared in print only once before (in 1600, in a compilation of Greek texts edited by David Hoeschelius, 1556–1617), the *Geographia* was a sizeable work by one of the most noted geographers of antiquity, which had already run through several printed editions since

⁵ Grafton, Defenders of the Text, 4–5, 158–203.

⁶ Blok, *Vossius and his Circle*, 41, 43; Vossius, *Periplus Scylacis Caryandensis*, 'Perillustri, & Incomparabili Viro Claudio Salmasio'. On the influence of Saumaise on Vossius, esp. regarding the *Periplus*, see the contribution by Dirk van Miert in the present volume, above, 20–22.

⁷ Hattendorf, ed., Oxford Encyclopedia of Maritime History I, 94.

the end of the fifteenth century.8 Vossius aimed at nothing less than to produce an entirely new Latin translation, accompanied by a commentary on the whole text. To accomplish the task he had set himself – and perhaps encouraged by the publisher of the *Periplus*, Joan Blaeu (1596–1673) – he tapped a much wider group of sources and informants than he had done for the preparation of the *Periplus*. 9 Yet, he never managed to bring the project to completion. In a letter to Saumaise from 1647, cited by Frans Blok, Vossius complained that he was wrestling with the lack of system in Ptolemy's data and the rampant corruption in the extant manuscripts.¹⁰ When former Queen Christina of Sweden in 1666 encouraged Vossius to resume his work on the Geographia, he replied that he had lost valuable notes as a result of his forced departure from her court in 1652 and that, frankly, he found Ptolemy quite boring. 11 In addition to these practical and emotional stumbling blocks, Blok suggested, Vossius probably also lacked the mathematical skills needed to bring an undertaking of this scale to a successful conclusion. 12 The latter explanation seems less plausible than the former. Normally, inexperience did not inhibit Vossius to state his views on any subject at all, whereas confusions and contradictions in the Geographia more than once preoccupied him during the rest of his life. Both the book on the origins of the Nile and the essay on geographical longitude in the Variarum observationum liber were in a sense attempts to improve upon Ptolemy's work.

After in effect abandoning the Ptolemy project in the early fifties, Vossius turned to the work of a Roman writer on geography, *De chorographia* by Pomponius Mela, composed in 44 AD. This work had led an almost hidden existence during the Middle Ages but had enjoyed a remarkable revival since the middle of the fifteenth century. Of the 121 extant manuscripts of Mela's book, 117 date from the fifteenth century or later. The first printed edition appeared in 1471. 13 *De chorographia* was a kind of mixture between geography, topography and ethnography. Mela's aim had been to a give a description of the known world, centred upon the Mediterranean, focusing on names of places and peoples and what he called 'their fairly

 $^{^8\,}$ Vossius, $Periplus\,Scylacis\,Caryandensis,$ 'Praefatio', refers to Hoeschelius, $Geographia\,Marciani\,Heracleotae.$

⁹ Blok, Vossius and his Circle, 43-45.

¹⁰ Vossius to Saumaise, January 1647, in: ibid., 44-45. See also above, 32.

¹¹ Ibid., 45, 487-488.

¹² Ibid., 45.

¹³ Romer, Pomponius Mela's Description of the World, 27–29, esp. n. 46.

192 KAREL DAVIDS

puzzling arrangement'. 14 When Vossius set himself to prepare a new edition, calling it after its first three words De situ orbis, he did not merely want to provide a critical text, based on a comparison of a variety of manuscripts, but also to comment upon the phenomena, curiosities and stories that Mela discussed along the way – which were indeed far less boring than Ptolemy's data. 15 As the title of Vossius' book suggests, his comments actually took up far more space than the edition of the text itself. The Observationes were nearly five times as long as De situ orbis. It was precisely the narrative aspect of Mela's book that offered Vossius the opportunity for digressions of his own. More particularly, he took Mela as a starting point to expound his views on the behaviour of light and settle a score with René Descartes (1596-1650). He seized on Mela's story of how the rising of the Sun could be observed from Mount Ida (near Troy) and on his descriptions of the area around the Black Sea to give lenghty expositions on refraction and the nature of clouds, vapours and snow, poking fun at the hotchpotch clouds imagined by Descartes.¹⁶

Vossius' ideas about light were elaborated in a separate study published in 1662, *De lucis natura et proprietate*, which also included a more extensive critique of Cartesian views and launched the unjust claim that Descartes had borrowed his law of refraction from Snellius.¹⁷ This study, and its impact, does not concern us here.¹⁸ What is interesting to note, however, is that at this point in time, Vossius' geographical studies took a thematic turn. After 1660 Vossius chose to write studies on specific topics in geography, instead of producing text editions of ancient geographical authors. Classical texts now became raw material for the development of his own vision about the earth. The first product was his book on winds, tides and currents, *De motu marium et ventorum liber*, published in 1663, which presented a radically different approach from that proposed by Descartes in the essays added to the *Discours de la méthode* (1637) and

¹⁴ See Mela's opening sentences in Romer, *Pomponius Mela's Description of the World*,

¹⁵ For manuscripts of Mela in possession of Vossius, see Dirk van Miert's contribution to the present volume, 32, n. 65; for Vossius' interest in Mela, see also Fokko Jan Dijksterhuis' contribution, esp. 157–162.

¹⁶ '[R]idiculae nubes istae Cartesii, in quibus nix, grando, lapides, animalia, moles denique vastissimae e solida conflatae glacie, eaeque pendulae, nec unquam deorsum labentes, proveniunt' (Vossius, *Observationes ad Pomponium Melam*, 94).

¹⁷ Vossius, De lucis natura, 35.

¹⁸ On *De lucis natura* and the discussion about Mount Ida, see the contribution by Fokko Jan Dijksterhuis in the present volume, 157–162. On Vossius' attitude towards Descartes, see the contribution by Eric Jorink, 130, 132–133, 136–139.

in the *Principia philosophiae* (1644), although the French philosopher is nowhere mentioned by name.¹⁹ Rejecting any explanation based on 'occult qualities or magnetisms' and refusing to admit any motion 'which I could not... confirm by infinite Testimonies and Experiments of Sea men', as he stated in the English edition of 1677, Vossius suggested instead that all motions of the seas and the winds proceeded from a single cause, namely 'that the Sun does warm, and the Water as other bodies is thereby dilated'.²⁰

No less radical were his views on the origins of the Nile, which became the topic of another study in 1666. Once again Vossius applied his razor. He dismissed the idea that the Nile (or any other river) could arise from water stored in subterranean reservoirs or could flow through 'occultos canales' from the ocean or from the bowels of the Earth.²¹ Neither did he believe that the Nile originated from lakes having their sources in the 'Mountains of the Moon' near the equator, which, ever since Ptolemy, formed a familiar feature of the image of Africa's interior.²² The map included in *De Nili et aliorum fluminum origine* — which in itself was a rare item in Vossius' geographical publications — in fact showed a largely blank area south of Ethiopia (fig. 1).²³ Rivers only sprung from rainfall, Vossius claimed. In his view, the sources of the Nile were located nowhere else than in Ethiopia, and the Nile floods were caused by no other factor than rainfall in the Abyssinian mountains. An analysis of the timing of the Nile floods and the rainy season in Ethiopia was adduced to prove his point.²⁴

In his final essay on geography, 'De emendatione longitudinum', published in 1685 in his *Variarum observationum liber*, Vossius directed his attention to the issue of distances on the globe.²⁵ Although these studies did not contain maps, they were more cartographical in nature than any of his previous works. He set out to construct an accurate picture of the locations of places and countries in Asia and around the Pacific, expressed in degrees of longitude if possible, on the basis of the most reliable

 $^{^{19}}$ Burstyn, 'Theories of Winds and Ocean Currents'; AT IX, 'Principes de la philosophie. Quatrième partie', sections 49–53.

²⁰ Vossius, *A treatise concerning the motion of the seas*, 'The Author to the Reader'.

²¹ Cf. the views of Nicolas-Claude Fabri de Peiresc on waters and mountains discussed in Miller, 'Peiresc', 173–178.

 $^{^{22}}$ Vossius, De Nili origine, 7–8; Randles, 'South-east Africa'; Ptolemy, Geographia universalis, 80.

²³ Vossius, *De Nili origine*, maps of Northeast Africa and Ethiopia.

²⁴ Ibid., 23-27, 39-44.

 $^{^{25}}$ Vossius, 'De emendatione longitudinum' included in: Idem, $\it Variarum~observationum~liber,$ 141–186.



Fig. 1. Map, showing the origin of the Nile. Taken from Vossius, De Nili origine, between pages 48 and 49 (LUB).

testimonies he could lay his hands on. What Vossius aimed at in these studies was, essentially, to get the maps right, as far as the existing body of knowledge allowed.

Vossius' Strategy and Sources

Apart from Italy and France, none of the parts of the world Vossius described in his geographical works he ever saw with his own eyes. He rarely set foot in the world south of Paris, east of Stockholm or west of Windsor. Although Vossius could hardly be called a sedentary scholar, he was no explorer either. He did not travel the extra mile to cross vast oceans, visit distant countries or experience alien cultures for himself.

Vossius' strategy in his geographical studies was to compare a variety of texts or visual sources and if necessary check the calculations, to select matters of fact that were corroborated by reliable testimonies and to seek for economical explanations of natural phenomena that were consistent with human reason. This strategy tallied with his rejection of complex Cartesian concepts and hypotheses and his critique of widely held notions about unseen subterranean channels and mysterious mountains that were supposed to generate rivers in inexplicable ways. Vossius, instead, preferred to keep it simple. 'I have not followed the example of others, who suppose many things which do not exist, and which, although they are imagined to exist, complicate rather than solve the problems which occur everywhere', he wrote in the preface to *De motu marium*. ²⁶ He reasoned with uniform principles, plain diagrams and simple mathematical arguments.

Reasoning is an armchair exercise. But what about the reliable testimonies? If Vossius was not much of an explorer himself, where did he get the information from that formed the core of his geographical work? In his book on Vossius' early life and career, Blok reports that in Amsterdam in the late 1630s, Vossius sought contact with Spaniards who would be able to tell him about their journeys in faraway countries.²⁷ However, face-to-face meetings with eyewitnesses appear to have been the exception rather than the rule. There is no evidence that Vossius often talked with

 $^{^{26}}$ '... non secutus sum aliorum exemplum, qui multa supponunt quae neque sunt, et quamvis esse fingantur implicant potius quam solvunt difficultates quae *passim* sese offerunt' (Vossius, *De motu marium*, 'Ad lectorem', sig. (:.) (:.)^{r-v}).

²⁷ Blok, Vossius and his Circle, 43.

196 KAREL DAVIDS

merchants, soldiers, seafarers or other seasoned travellers to learn more about other parts of the world. His prime sources of information were his networks in the commercial, political and scholarly worlds, and of course the books, manuscripts, maps and atlasses which he acquired for his own library.

Vossius' networks in the mercantile and political worlds reached into the highest circles of the Dutch trading companies and into the heart of the Amsterdam ruling elite. Samuel Blommaert (1583–1654), Director of the West-India Company, supplied him with data about the west coast of Africa. Nicolaas Witsen (1647–1717), Johannes Hudde (1628–1704) and Coenraad van Beuningen (1622–1693), Directors of the VOC and key figures in the Amsterdam regent class, provided him with access to recent information about the geography of Asia. Thanks to these contacts, Vossius had an opportunity in the late fifties or 1660s to take a look at a manuscript sent by Governor-General Joan Maetsuycker (1606–1678) to the Directors in Amsterdam, dealing with winds and currents in Strait Sunda. New evidence concerning the shape and position of Nova Zembla and the north-eastern corner of Siberia reached Vossius in the 1670s and 1680s via Witsen and Van Beuningen, who were keen students of geography themselves.²⁸

Vossius also obtained useful information through contacts with other scholars. Jacob Golius (1596–1667) in Leiden, for instance, informed him about the latitude of places in Ethiopia, Franciscus Junius the Younger (1591–1677) in Arundel supplied him with a manuscript of Pomponius Mela and Johannes Fredericus Gronovius (1611–1671) sent him a codex of Ptolemy's *Geographia* from London, which was carried across the North Sea by a fishing boat.²⁹ With Melchisédech Thévenot (1620–1692) in Paris, who in the 1660s embarked on an ambitious project of collecting, translating and publishing travel accounts about various parts of the globe, Vossius exchanged materials on a regular basis.³⁰ While he provided Thévenot with manuscripts and travel accounts about China – sometimes via Van Beuningen or Christiaan Huygens (1629–1695) – Thévenot sent Vossius a Portuguese map and informed him about his correspondence with

²⁸ Davids, 'Wijde horizon', 29–30; Rietbergen, 'Witsen's World'; Peters, *Wijze koopman*, 82–83. Cf. above, 153, n. 148, and 177, n. 49.

 $^{^{29}}$ Vossius, *De Nili origine*, 70; Vossius, *Observationes ad Pomponium Melam*, Preface to the reader; Dibon and Waquet, *Gronovius*, 25–26, 55–56.

³⁰ Dew, 'Reading Travels'; Idem, *Orientalism*, 81–130. The copy of the first edition of Thévenot, *Recueil des voyages* in LUB, shelfmark 1365 H 6, was owned by Vossius.

Ferdinand Verbiest (1623–1688) in Beijing.³¹ Vossius appears not to have maintained any direct relations with Jesuit scholars. He did not correspond, for instance, with Martino Martini (1614–1661), Giovanni Battista Riccioli (1598–1671), Gaspar Schott (1608–1666) or Athanasius Kircher (1602–1680), although he had met the latter during his Grand Tour in Rome in 1642.³²

The absence of direct links between Vossius and the Jesuits is remarkable given that in his later geographical studies he leaned heavily on their work. Jesuit publications were well represented among the hundreds of items in the categories libri mathematici omnium generum and miscellanei et inter eos praecipue itineraria diversorum in diversis linguis in Vossius' library. He possessed a copy of the atlas of China composed by Martini, of Riccioli's Almagestum novum and Geographiae et hydrographiae reformatae libri duodecim, of Schott's Magia universalis naturae, Technica curiosa and Mechanica hydraulico-pneumatica as well as a number of books by Kircher. Moreover, he owned several printed collections of letters and reports sent by Jesuit missionaries in America and Asia, including editions of letters by Franciscus Xaverius (1506–1552) and Matteo Ricci (1552– 1610).³³ Once Vossius had chosen to give his geographic studies a more thematic focus and to leave the boundaries of the known world of antiquity, he turned more and more often to Jesuit publications as sources of information, in addition to classical texts and travel accounts by Spanish, Portuguese, Dutch, English or French explorers and seafarers. In his Observationes ad Pomponium Melam, he first drew on the work by Martini and Riccioli to make comparisons with mountains in China, Japan and other parts of the world.³⁴ Vossius' confident assertion that the sources of the Nile were located in Ethiopia was based on the account of the visit to Lake Tana in Ethiopia by the Jesuit missionary Pero Paes (1564–1622), which had been included in Kircher's Oedipus Aegyptiacus (1652) and Manoel d'Almeyda's História geral de Etiópia (1660). The source of the map included in De Nili et aliorum fluminum origine was presumably a map

 $^{^{31}}$ Thévenot to Vossius 22 April 1664 (LUB, Ms. Bur. F 11–I, fols 266r–267r); Thévenot to Vossius, 16 January 1665 (LUB, Ms. Bur. F 11–I, fols 271r–272r); Thévenot to Vossius, 3 March 1667 (LUB, Ms. Bur. F 11–I, fols 317r–318r); Thévenot to Vossius, 25 May 1668 (LUB, Ms. Bur. F 11–I, fols 307v–308r); see also the letters between Huygens, Thévenot and Brunetti on these matters in *OCCH* III, 347; IV, 7, 92, 158, 287, 297, 324.

³² Blok, *Vossius and his Circle*, 151. Vossius does not figure in the list of Kircher's correspondents printed in Fletcher, ed., *Athanasius Kircher*, 139–194. For his contacts with Vossius, see the contribution by Thijs Weststeijn in the present volume.

³³ See the copy of the catalogue of Vossius' library in LUB, Ms. BPL 127 AF; cf. on Jesuits and geography Harris, 'Mapping Jesuit Science'.

³⁴ Vossius, *Observationes ad Pomponium Melam*, 91 and 123.

198 KAREL DAVIDS

made by the Jesuit Balthasar Tellez (Telesius; 1596–1675), and which was published in Almeyda's book.³⁵ In his efforts to establish the longitude of places in Asia, the Pacific and Peru, Vossius heavily relied on the synthetic works compiled by Martini and Riccioli, whom he credited with a nearly unassailable authority. 'Teste Martinio Iesuita, viro certissimae fidei' he said about Martini in the *Observationes ad Pomponium Melam*, and 'praestantissimus et diligentissimus astronomus' was the accolade he gave Riccioli in *De emendatione longitudinum*.³⁶

Vossius' Audience and the Reception of his Views

What was the audience Vossius had in mind for his geographical works? Who were the intended readers, or intended users, of the data and ideas which he packed into his thematic studies or his text editions of ancient writers? The size and composition of the intended audience, I would suggest, changed over the years, starting with fellow-members of the Republic of Letters and then expanding to include various patrons as well as groups of users beyond the domain of the Republic of Letters.

The relevance of the first category is obvious. Vossius dedicated his first book on geography to one of the leading lights in the Republic of Letters, Claude Saumaise, and he later saw to it that copies of his works were sent to scholarly friends and relations such as Franciscus Junius the Younger, Thomas Marshall (1621–1686), Pierre-Daniel Huet (1630–1721), Jean Chapelain (1595–1674) and Queen Christina. A Danish polyhistor, Ole Borch (1626–1690), who frequented the meetings at Thévenot's in Paris in the early sixties, reported that Vossius was divulging interesting bits of information about faraway places such as the height of mountains in Tenerife and Peru and the tenuity of the air in certain parts of Africa. Clearly,

³⁵ Vossius, *De Nili origine*, 49–56, 70; Kircher, *Oedipus aegyptiacus* I, 56–59; Almeyda, *História geral*. I thank Dr Jan Loop for pointing out this source. On the background of Almeyda's work: Penenc, *Jésuites au Royaume du Prêtre Jean*, chapters IV and V. A copy of Almeyda's book was in Vossius' library, now LUB, shelfmark 1370 D 12.

³⁶ Vossius, Observationes ad Pomponium Melam, 91; Idem., Variarum observationum liber, 182.

³⁷ Vossius to Junius, 11 April 1639; and Junius to Marshall, 10 April 1666 (Van Romburgh, 'For my Worthy Freind', no. 126b, 640, n. 11; no. 213d, 1023, n. 12); Chapelain to Heinsius, 7 March 1659, OCCH II, 369; Huet to Vossius, 4 March 1659, LUB, Ms. Bur. F 11–I, fols 369^r–373^r; Blok, *Vossius and his Circle*, 487.

³⁸ OBI IV, 30 and 89.

Vossius liked to get his findings and views on geographical topics across to fellow-scholars.

But his publications on geography from at least the 1660s onwards served a more practical purpose, too. They were cast in the idiom used between patrons and clients. Although Vossius never found himself in a position where he had to earn a living by hack work, he could not be entirely sure of a permanent source of income either. He was after all not a university professor, a cleric in an established church or a gentleman of independent means, although he drew some income from real estate.³⁹ As a means of economic (and to a lesser extent, political) protection, patronage was therefore not unimportant to him. Between 1646 and 1670 the basis of his livelihood consisted of an income earned in his position as official historian of the States of Holland and Zeeland, wherein he had succeeded his deceased brother Matthaeus (1611–1646).⁴⁰ Over the years this income of 750 guilders a year was supplemented from a variety of other sources, such as a salary as librarian of the City Library of Amsterdam between 1646 and 1649 (of 250 guilders a year), an annuity as teacher and librarian of Queen Christina of Sweden between 1649 and 1655 (of 2,000 rixdollars a year), an income from sales of books and manuscripts (partly from the Queen's library) and an allowance of 1,200 livres granted by Louis XIV in 1663.41 However, the regular income from the Provincial States was in the long run only guaranteed on the condition that he continued his work on the history of Holland and Zeeland, which was started by his brother Matthaeus. Isaac, however, never finished a single new volume. Eventually, having patiently waited for more than twenty years, the States decided to put an end to the payment of his salary in 1670.42 Another 'meschant echec' – as Christiaan Huygens called it – befell Vossius shortly afterwards when King Louis of France, too, stopped his allowance.⁴³ Moreover, as late as 1668, Vossius had made failed attempts to persuade Queen Christina to pay him his back salary of 5,600 rixdollars.44 In the end, he was saved by King Charles II of England, who in 1673 arranged a new source of income for him as canon of Windsor, which he kept for the rest of his

³⁹ For the latter source of income, see Astrid Balsem's contribution to this volume.

⁴⁰ Blok, Vossius and his Circle, 201–202.

 $^{^{41}}$ Ibid., 201–202, 205, 267–268, 480–483; *OCCH* IV, 405–406, n. 9; Chapelain to Heinsius, June 1663, Chapelain *Lettres authentiques*. 383–384.

⁴² Blok, Vossius and his Circle, 202.

⁴³ Christiaan Huygens to Lodewijk Huygens, 4 August 1672, *OCCH* VII, 210–211 (esp. n. 8).

⁴⁴ Blok, 'Verdwaalde papieren', esp. 101-105.

life. And in exchange for financial security, Vossius had no qualms about joining evensong.

Judging from the dedications of his books, patrons outside the Republic of Letters appear to have become more important as intended readers or users of Vossius' books on geography in the 166os. Whereas the *Periplus Scylacis Caryandensis* was dedicated to Claude Saumaise and the *Observationes ad Pomponium Melam de situ orbis* only contained a preface addressed to the honest reader, *De motu marium et ventorum liber* (1663) opened with a dedication to the States of Holland and *De Nili et aliorum fluminum origine* (1666) with a dedication to Louis XIV. Vossius' friend Van Beuningen, who was then Dutch ambassador to France, took pains to ensure that the King would indeed receive a copy of the book.⁴⁵ Would it be too rash to presume that Vossius saw the publication of these books partly as an instrument to placate the men in power who provided him with his main sources of income and, perhaps, that he even selected the topics of these studies with an eye to this very purpose?

In the case of the book on the Nile, this supposition is the more plausible as another book on the subject, *Discours sur les causes du desbordement du Nil*, had appeared in Paris the year before. It had equally had been dedicated to the king of France.⁴⁶ The author of this *Discours*, Marin Cureau de la Chambre (1595–1669), *médecin ordinaire du Roi*, figured on the list of recipients of an allowance from the king as well. In contrast to Vossius, who (together with, among others, Nicolaas Heinsius and Christiaan Huygens) received only the modal sum of 1,200 *livres*, La Chambre with his allowance of 2,000 *livres* belonged to the top-ten of the 54 men on the list.⁴⁷ Even though Vossius made no direct reference to the physician's book, it was a public secret, witness the announcement in volume 1 of the *Philosophical Transactions*, that his tract was 'opposed to that of Monsieur de la Chambre'.⁴⁸ Vossius was certainly familiar with the *Discours*. The copy in Leiden University Library comes from Vossius' own collection.⁴⁹ And like La Chambre, Vossius tried to flatter the French king in his pref-

⁴⁵ Van Beuningen to Vossius, 25 June 1666, LUB, Ms. Bur. F 11–II, fols 42^v–43^r; cf. above,

⁴⁶ De la Chambre, *Discours sur les causes du desbordement du Nil.*

⁴⁷ OCCH IV, 405-406, n. 9.

⁴⁸ Philosophical Transactions 1 (1665) 145.

 $^{^{49}}$ De la Chambre, Discours sur les causes du desbordement du Nil, LUB, shelfmark 540 D 28.

ace by suggesting an association between great kings and great rivers. The Nile was itching to belong to the realm of the Sun King.⁵⁰

In 1667, a French translation of *De Nili origine* appeared in Paris.⁵¹ The edition was in all probability published without Vossius' previous consent. The unknown translator had received a copy of the book not from Vossius himself, but from a 'Monsieur Hardy', who can presumably be identified with the mathematician Claude Hardy (1598–1678), *conseiller au Châtelet*.⁵² Added to this edition was a copy of Pero Paes' account, drawn from Kircher, and an abstract from a report by an Ethiopian ambassador, which partly contradicted Vossius' view on the sources of the Nile.⁵³ The very fact that someone of his own accord thought it important to have *De Nili origine* quickly translated into French and even spread the rumour that Vossius was working on a similar book on the river Niger (which he was eager to translate as well) reveals that Vossius' entry into the debate soon drew attention among a wider audience than that of scholars and patrons alone.⁵⁴

The third category of readers or users whom Vossius aimed to reach with his work indeed consisted of common users outside the Republic of Letters. In the dedication of *De motu marium et ventorum liber* to the States of Holland, Vossius claimed that knowledge of winds and currents at sea was of vital importance for the safety of shipping. He reasoned that his treatise would not only be of theoretical significance but also of practical use, as it might contribute to a reduction of the risk of shipwreck.⁵⁵ This was not just an argument of convenience. Vossius' library betrayed a profound interest in nautical issues. Apart from the Jesuits, there was probably

⁵⁰ '... audet tamen hic fluvius in felicissimo tuo imperio, in tanta dulcium aquarum copia et ipse quoque aliquem sibi flagitare locum' (Vossius, *De Nili origine*, 'Ludovico XIV Franconiae et Navarrae Regi Christianissimo', sig. 2^r).

⁵¹ Vossius, *Dissertation touchant l'origine du Nil*. A copy is in the Municipal Library of Rotterdam, shelfmark 1107 F 15.

⁵² N.N. 'Au lecteur', in: Vossius, *Dissertation touchant l'origine du Nil.* Claude Hardy is mentioned once, as *conseiller au Châtelet*, in Blok, *Vossius and his Circle*, 315, n. 67.

⁵³ 'Discours du R.P. Kircher... avec la relation du R.P. Pierre Païs' and 'Extrait d'un Ambassadeur d'Ethiopie', in: Vossius, *Dissertation touchant l'origine du Nil*, 81–90; 91. The abstract of the ambassador starts with the claim that the origin of the Nile was a fountain (which Vossius thought erroneous) and also states that summer in Egypt coincided with winter in Ethiopia (which Vossius denied being the case, as both countries lay in the same hemisphere).

⁵⁴ N.N. 'Au lecteur', in: Vossius, *Dissertation touchant l'origine du Nil*.

⁵⁵ 'Illustrissimis et potentissimis Hollandiae et West-Frisiae ordinibus' (Vossius, *De motu marium et ventorum liber*, sigs $(:)2^{v}-(:)3^{r}$, $(:)4^{r}$.

202 KAREL DAVIDS

no scholar in Europe in the second half of the seventeenth century who was better informed about matters of seafaring than Isaac Vossius.⁵⁶ His expectations about the practical use of his findings and insights seem only to have increased after his departure for England in 1670. The English translation of *De motu marium* in 1677 was provided with a dedication – signed by the translator Archibald Lovell – to Lord George Berkeley (1628– 1698), Governor of the Levant Company and member of the Committee of the Dutch East India Company (VOC). It expressed the hope that 'by the favour of (his) Lordships protection it may be more esteemed of those skilfull and industrious, who under the auspices of our Lordships Companies descend into the deeps'.⁵⁷ Partly at the instance of King Charles II, Vossius conceived the idea of having someone produce a terrestrial globe, on which seas and continents would be depicted 'with the right distances'. Writing (in Dutch) to Van Beuningen shortly before his death, Vossius asked his friend whether he knew an accomplished globemaker who might assist him in the job. 'That would be a great benefit to me, and even more to navigation which (was still) very defective', Vossius mused, because the lands and waters were not placed on the right meridians, which made it impossible to estimate longitude'.⁵⁸

At the end of the day, the results of Vossius' efforts fell short of his expectations. Yet, among the intended public of common users outside the Republic of Letters, his views did not go entirely unheeded. Thanks to Vossius' old friends Van Beuningen and Hudde, both Directors of the Chamber of Amsterdam, the VOC in the late 1680s became aware that efficient management of shipping capacity required paying systematic attention to patterns of winds and currents. The Board of Directors in 1690 accordingly decided that a project to compose a comprehensive atlas of all the relevant charts, maps and plans of Asia and South Africa, initiated shortly before, should also include 'an accurate draft of what was known about the direction of the monsoons or trade-winds [and] the set of currents'.⁵⁹ These were precisely the topics discussed in the correspondence between Vossius and Van Beuningen in 1685 and 1686. Yet the corpus of knowledge contained in this atlas, which was completed about 1700, was not divulged outside the offices of the VOC. Throughout the eighteenth century, the atlas only served as a source of information for the Directors

⁵⁶ Davids, 'Wijde horizon', 32–33, 36–37.

⁵⁷ Vossius, *Treatise concerning the motion of the seas*, 'The epistle dedicatory', sig. A₃r.

⁵⁸ Vossius to Van Beuningen, 23 February 1688 (LUB, HUG no. 45; my tr.).

⁵⁹ Gaastra, Bewind en beleid, 163–164; Zandvliet, Mapping for Money, 162.

of the Company themselves. The work never appeared in print.⁶⁰ There is no indication that seafarers in other countries or other branches of shipping actually made use of Vossius' ideas about the motions of the winds and the seas.

Vossius' patrons were not greatly impressed by his geographical work either. The dedication of *De motu marium* to the States of Holland in 1663 failed to prevent the loss of his position as official historian seven years later, nor did the panegyric to Louis XIV in his book on the Nile eventually ensure the continuation of his royal pension. The fact that at the end of the seventeenth century, for the first time since the days of the Jesuit Paes, a European, namely the French doctor Charles-Jacques Poncet (d. 1706), at the instigation of the French consul in Caïro, made an extensive expedition through northern Sudan and Ethiopia, had nothing to do with Vossius' writings on the sources of the mighty river. 61 King Charles II, Vossius' new patron after 1670, presumably valued his reputation as a philologist and polyhistor more highly than his achievements as a geographer.⁶² When the King for once lent a willing ear to Vossius' geographical ideas, the outcome was rather unfortunate. Spurred by the publication of a letter about the shape and position of Nova Zembla in the *Philosophical* Transactions in 1674, providing information gathered by Nicolaas Witsen (probably doctored by Vossius), King Charles decided to send two ships to explore the possibility of a passage along the island to Asia. 63 One of the ships was shipwrecked, however; many lives were lost and the expedition was a complete failure.64

What were the reactions to Vossius' geographical work in the Republic of Letters itself? In his well-known article about Vossius and the English biblical critics, David Katz quoted the preface of the English edition of *De motu marium* in 1677, suggesting that 'after only seven years in England' Vossius noticed a failure of understanding for his work among his English audience:

I am so far from believing that most of you will be favorable and kind to me, that I am even perswaded that at present there are some, who under

⁶⁰ Zandvliet, Mapping for Money, 162–163.

⁶¹ Udal, Nile in Darkness, 36-40.

⁶² Katz, 'Isaac Vossius and the English Biblical Critics', esp. 157-159.

⁶³ 'A letter, not long since written to the publisher by an experienced person residing in Amsterdam, containing a true description of Nova Zembla, together with an intimation of the advantage of its shape and position', *Philosophical Transactions* 9 (1674) 3–4.

⁶⁴ Peters, 'From the study of Nicolaes Witsen', esp. 40-41.

204 KAREL DAVIDS

colour of honour and good will, do secretly lye in wait for my writings, whetting already their venemous Teeth, that with the breath of pestiferous and pysonous [sic] breast, they may either kill, or render hateful and maimed all the births of my diligence, and even before they see the light. It may be you expect that with a great Train I should march out against such, and revenge my self of so great an injury: but if you think so you are much mistaken, for I take it not to be my concern to set upon those who declare War, not against me, but truth it self. If I be not misinformed by some friends, there live in some Colleges a certain kind of Men, who have mutually combined by oath, to admit of no truth which comes from my hands. And although they dissent amongst themselves in opinion, yet they agree to brand the most part of my writings (though they understand them not) with the name of erroneous and meer impostures. 65

However, Vossius' dim view of his audience was not confined to the English. Nor did it date only from the mid-1670s. The preface in the English edition of 1677 was simply a translation of the Latin preface to the original edition of *De motu marium*, published in 1663. 66 The aggrieved tone of this preface must have been occasioned by the response to Vossius' works published before that date. And indeed, the *Dissertatio de vera aetate mundi, De lucis natura et proprietate* and the sections on light in the *Observationes ad Pomponium Melam* had provoked some fierce reactions in writing and in print, which in turn – despite his pious assurances to the contrary – had led Vossius 'to march out in great Train'. 67 The fact that the entire preface was retained in the English edition of 1677 can at best be interpreted as an indication that Vossius had not changed his opinion about his learned detractors (wherever they could be found in Europe) in the intervening fourteen years.

All the same, the hostile response which Vossius seemed to detect from the early sixties onwards did not concern geographical studies. In contrast to his publications on chronology, biblical criticism or the nature and behaviour of light, his work on geography seldom gave rise to lively polemics. Apart from the passages on light, the *Observationes* on Mela only led to some discussion many years later in an oblique way, when Jacob Gronovius (1645–1716) dared to edit a new edition of *De situ orbis*, which provoked Vossius' censure of this 'iuvenis... valde iracundus'.⁶⁸ Vossius'

 $^{^{65}}$ Cited from Vossius, A treatise concerning the motion of the seas and the winds, 'The Author to the Reader'.

⁶⁶ Compare the two prefaces in the edition of *A treatise concerning the motion of the seas and winds* and *De motu marium et ventorum*, ed. Deacon.

⁶⁷ Rossi, *Dark Abyss of Time*, 145–151; Dijksterhuis, *Lenses and Waves*, 156. See also the contributions by Anthony Grafton and Fokko Jan Dijksterhuis in this volume.

⁶⁸ Vossius, Observationum ad Pomponium Melam appendix.

criticism of the Jesuits' method of determining the longitude of the Cape of Good Hope in a letter to Van Beuningen in 1688, which found its way in the *Bibliothèque universelle et historique*, in turn provoked a sharp rebuttal by Thomas Gouye (1650–1725), professor at the Jesuit College in Paris and by Philip de la Hire (1640–1718), member of the Académie Royale des Sciences.⁶⁹

Normally, however, the reaction to Vossius' publications on geography lay somewhere between lukewarm reception and polite disagreement. De motu marium was discussed in England soon after its publication in 1663, but it did not cause a great stir. In a brief comment in the Philosophical Transactions in 1666, the mathematician John Wallis (1616–1703) remarked that he 'was well enough pleased with what is historical in it, of the matter of fact' and that he was 'secure that [Vossius] was therein accurate and candid, not wresting the *Phenomena* to his own purpose', but that he found 'nothing in it, which doth induce [himself] to vary from his [own] Hypothesis' on the 'flux and reflux of the Sea', which he had just published.⁷⁰ Edmond Halley (1656–1742) in his essay on trade winds in 1686, made no mention of Vossius' book.⁷¹ Vossius' book on the Nile, like La Chambre's, was reviewed in the *Philosophical Transactions*, but it did not become the subject of debate.⁷² When Jean Baptiste d'Anville (1697–1782) almost a century later devoted a fresh study to the question of the origin of the Nile, he mentioned Vossius in passing, but he did not engage in a prolonged discussions of his views, even if his own position differed thoroughly from that of Vossius. In contrast with Vossius, d'Anville did not believe that the sources of the Nile had already been discovered. And in his map of Africa he reintroduced the very feature that had been ejected in Vossius' account: the 'Mountains of the Moon'.73

Conclusion

Even as a geographer, Vossius remained first and foremost a philologist. His prime urge was to compare, to check, double-check and stick to the

⁶⁹ Vossius to Van Beuningen, 23 February 1688 (LUB, HUG no.45); (Vossius), 'Extrait d'une Lettre de M. V. écrite de Londres de 23. de Fevrier 1688 à M. V.B.'; Hsia, 'Jesuits, Jupiter's Satellites and the Académie Royale des Sciences', esp. 248–249.

⁷⁰ Wallis, 'An appendix written by way of letter', esp. 286–287; Deacon, 'Introduction', 21.

⁷¹ Halley, 'An historical account of the trade winds'.

⁷² Philosophical Transactions 1 (1665–1666) 304–306.

 $^{^{73}}$ d'Anville, 'Dissertation sur les sources du Nil', esp. 55 and the map between 46 and 47.

206 KAREL DAVIDS

facts that could be confirmed by textual sources. This does not mean that Vossius never changed his method. Around 1660, as I have shown, his writings on geography evidently took a more thematic turn. Instead of churning out text editions of ancient geographical authors, he began to produce studies on particular topics in geography. Classical texts now became raw material for the development of his own vision about the earth, along with written, printed and oral sources of a more recent date. He expanded the spatial scope of his writings to include parts of the globe outside the known world of Antiquity. And in his book on the Nile he even managed to insert a number of maps. Yet, he never went out to explore the world for himself. He always had recourse to data collected by other authors and observers. And it did not occur to him to record his findings about the earth into a comprehensive, visual form until the very end of his life.

Vossius' work on geography was erudite but it did not produce many fresh findings or insights. In contrast with the Jesuits, whom he held in high regard in this area of inquiry, Vossius had no access to a constant flow of new information about the world outside Europe. Even his close connections with directors of Dutch trading companies did not yield such a rich amount of data as the Jesuit network made available to Riccioli or Kircher. And unlike Pero Paes or Martino Martini, Vossius did not cross other parts of the globe himself. Unlike Athanasius Kircher, he never went so far as to descend into a red-hot volcano to see the subterranean world at close range, even though he, too, during his Grand Tour in Napels in 1642, reached the brink of the crater of the Vesuvius. At the end of the day, Vossius merely became a lesser Riccioli, a minor Martini, a pocket-sized Kircher. As a geographer, Vossius forever lingered in the shadow of Jesuits.

⁷⁴ Findlen, 'The last Man who knew Everything . . . or did He?', 143, n. 23.

VOSSIUS' CHINESE UTOPIA

Thijs Weststeijn

Isaac Vossius' reputation as a libertine and intellectual radical is intertwined with his career as a Sinologist. Charles II made his famous remark that Vossius 'believed everything except what was in the Bible' after hearing him speak about China.¹ The scholar, whose enthusiasm for Chinese culture allegedly 'even surpassed Marco Polo's' even though he never left Europe, has been studied by historians of philosophy only in his capacity as a Sinophile.² As Jonathan Israel concludes, Vossius' writing about China was merely a rhetorical ploy, 'a subversive strategy within western intellectual debate... as part of Vossius' campaign to sap confidence in biblical chronology... as well as in the centrality of revelation'.³

Before addressing the question of whether Vossius' ideas were truly seminal to 'the emancipation of man', to quote Israel's title, this article will explore some routes into his Chinese Utopia. First, to assess the nature of Vossius' Orientalism one should take account of his original ambition to learn Arabic. In 1637 he studied this language with Jacob Golius (1596–1667), who became the first Dutch Sinologist when he identified Chinese astrological terms in a Persian text. His collection of 25 Chinese manuscripts and books may have formed the basis of Vossius' later interests. As Vossius exchanged his father's philological approach for a more broadly historical one that involved philosophy as well as the analysis of the visual arts, he returned twice to Chinese civilization. New documents relating to this country kept pouring into Europe and the scholar was well aware of its potential to draw the attention of the linguists, philosophers, and artists of his day.

¹ 'Le Roi Charles II connoissoit bien son caractere; car l'entendant un jour debiter des choses incroyables de ce Pays [China], il se tourna vers quelques Seigneurs qui étoient avec lui et leur dit: ce sçavant Theologien est un étrange homme, il croit tout hors la Bible' (Nicéron, Mémoires XIII, 133).

² Pinot, La Chine et la formation de l'esprit philosophique en France, 202.

³ Israel, *Enlightenment Contested*, 640; and the discussion of Vossius in Israel, 'Admiration of China and Classical Chinese Thought', 3–5. Cf. also the contributions by Anthony Grafton (44, 65–67, 75, 82–83) and Scott Mandelbrote (91–93) earlier in this volume.

⁴ Vossius' brother, Dionysius, also studied with Golius, cf. Blok, *Vossius and His Circle*, 63, 18. On Golius, cf. Van Campen, *Jan Theodore Royer*, 60–61.

In an earlier publication, I studied how Vossius' first work on China was sparked by reports of its antiquity, which challenged Western notions of sacred history.⁵ In a heated exchange of statements of 1659, Vossius discussed this challenge with Georg Hornius (1620–1670), an orthodox Protestant scholar based at the university of Harderwijk. Defending the accuracy of the Chinese historians against Hornius' doubts, he arrived at the idea that in China a cultural and philosophical Utopia had been realized. This idea was presented again, among other issues related to Biblical authority, in the Variarum observationum liber of 1685, which included a chapter on the arts and sciences of the Chinese. Within the framework of Vossius' reputation as 'the first European scholar to have accepted enthusiastically [the chronology of] ancient Chinese history', this article will focus on his Chinese Utopia as a 'culture of the brush': his unique defense of China's visual arts and how it was related to European discussions about Chinese writing and philosophy.⁶ If Vossius did not believe in the Bible, what was it that he believed about China?

Vossius, Hornius, and the Philosopher's Republic

Vossius' chapter 'De artibus et scientiis Sinarum' contained a view of China which surpassed in its utopian character most of what had been written before, extolling its politics, arts, navigation, medicine, and astrology. It even concluded that in China an improved version of Plato's ideal reign of the philosopher-king had been realized: 'when their Kings sin, the philosophers have as great a liberty to admonish them, as ever the Prophets had with the Israelites. The people have the same freedom to judge the philosophers, when they do not fulfill their duty'.

Where did Vossius get this idea, completely at odds with the reality of Chinese autocratic rule in the seventeenth century? His father's history of philosophy of 1650 was silent on China. The view that Chinese thought was very sophisticated reached the wider Dutch audience when

⁵ Weststeijn, 'Spinoza sinicus'.

⁶ Quotation on Vossius from Van Kley, 'Europe's "Discovery" of China', 370.

⁷ Vossius, Variarum observationum liber, 69–85.

⁸ 'Quod si peccent reges, tanta in admonendis illis philosophorum est libertas, quanta vix olim prophetarum apud Israelitas. Eadem plebis in monendis philosophis libertas, si et illi suo non bene fungantur officio' (Vossius, *Variarum observationum liber*, 58–59).

⁹ G.J. Vossius, *De philosophia et philosophorum sectis libri II*. This traditional book combined philosophy with chapters 'on pasturing and hunting' and 'on painting and sculpture'.

reports by Jesuits were translated, as part of Joan Blaeu's (1596–1673) *Atlas major*: '[China's] history, written by the Chinese themselves from ancient times onwards, comprises almost three thousand years before the birth of Christ... They say that they had excellent letters and philosophy... already at that time'. ¹⁰ The only earlier Dutch discussion of Chinese thought was Hornius' *Historia philosophica* (1655). Hornius states that Chinese ethics and political theory are 'fairly accurate': 'they have thought so splendidly about the Republic, that if Plato were to come back from the underworld, he would not wish for any other [political and ethical doctrine] than that of the Chinese'. ¹¹ Echoing remarks by libertines such as François la Mothe le Vayer (1588–1672), who placed Confucius in Paradise with other great pagan thinkers, Hornius thought that the Chinese philosopher surpassed 'many of the Pagans in morals and judgments'. ¹² Most worthy of note, however, was the fact that:

the entire Chinese Empire is ruled only by Philosophers. They are paid homage and are deferred to by all generals and leaders with great humility and with curious ritual, and it happens not infrequently that the generals are beaten by them, just like how, in our countries, children are beaten by their teachers. . . And it is astonishing that those philosophers surpass the soldiers themselves in faith to their King and their Republic and in their contempt of death when it is for their fatherland. Thus, only in China the Philosophers reign, and there Plato's wish has been fulfilled. ¹³

Probably, Vossius junior used Hornius' account for his eulogy of Chinese philosophy more than two decades later. Their remarks may reflect notions held more widely in the Dutch Republic of Letters. When the Jesuits

^{10 &#}x27;[D]es selfs historie, door de Sinezen selven van seer oude tijden geschreven, begrijpt byna drie duysent jaren voor de geboorte van Godts zoon...Men seght dat sy toen alree de letteren, de wysbegeerte...voornemelyck gehadt hebben' (Blaeu, Grooten atlas VI, introduction to the maps of China).

¹¹ 'Doctrinam ethicam et politicam satis accuratam habent. Scribit Lombardus tam praeclare eos de Republica commentari ut, si ab inferis Plato remearet, alium desideraturus quam Sinensem non foret' (Hornius, *Historiae philosophicae libri VII*, 309).

¹² Lach, 'China in Western Thought and Culture', 360.

^{13 &#}x27;Confutius...sane moralibus et sententiis plerosque ethnicorum non aequavit modo, vero etiam superavit...Sed imprimis notatu dignissimum est, universum Imperium Sinense a solis philosophis administrari et apud eos merum mistumque imperium reperiri. Hos milites ac duces omnes magna animi demissione ac ritu singulari venerantur eisque subjiciuntur, et non raro contingit illos ab his non secus vapulare, quam apud nos pueri a ludimagistro.... Et quod mirabilius est, hi philosophi fide erga regem ac remp[ublicam] mortisque pro patria comtemptu palmam ipsis militibus sine dubio praeripiunt. In sola igitur Sina regnant philosophi, ibique voti sui compos Plato factus est' (Hornius, *Historiae philosophicae libri VII*, 309–310).

finished their translation of Confucius' works in 1669, they originally wanted to publish with Blaeu in Amsterdam. It is unclear why this did not happen; eventually, the book appeared in Paris in 1687.¹⁴

These remarks on Chinese republicanism show that Vossius and Hornius actually agreed more closely in their views than their controversy of 1659, on the antiquity of Chinese history, suggests. Their mutual interest is particularly clear from their use of Athanasius Kircher's (1602–1680) ideas. Vossius owned various works by this prolific Jesuit and discussed these in the argument with Hornius. On his Grand Tour of 1642 Vossius apparently met Kircher, whom he describes as his 'friend when in Rome', and admired the collection of Sinica in the *Museo Kircheriano*. He it was not unusual for Kircher to receive Protestants or to correspond with them; several of his books were published in Amsterdam. Scholars from all over Europe visited his museum, including Vossius' lettered patron Queen Christina, who was presented with an Arabic manuscript.

Father Kircher's original ambition had been to go to China as a missionary, but this request was denied. In 1635, he arrived in Rome with the assignment of deciphering the Egyptian hieroglyphs; soon he claimed to have succeeded – and to have related them to Chinese characters. His ideas reveal much about the mindset of 'universal scholarship' in the second half of the seventeenth century; in his writings, the end often seems to justify the means. This entails more than just a probabilistic view of science in the service of the True Faith: Kircher's aim was to write 'world history', encompassing the remotest regions and the most ancient history

¹⁴ Wills, 'Some Dutch Sources', 271. Athanasius Kircher objected to working with the Protestant Blaeu. After hearing from the 'Padri fiamenghi' in China on their projected Confucius publication, he was uncompromising: 'non vorria io che il Blaeu le [i.e., the manuscripts] trattenesse' (Archive Pontifica Università Gregoriana, Misc. Epist. Kircher, 560, fol. 79'). See Golvers, 'Confucius', 1145–6. The Parisian publisher was Daniel Horthemels, a Dutchman recently converted to Catholicism.

¹⁵ I. Vossius, Castigationes, 41; Hornius, Defensio, 51.

^{16 &#}x27;Kircherus... mihi olim Romae amicus' (Vossius, Castigationes, 41). On his visit to Rome in 1645, Coenraad Burgh gave Vossius' regards to Kircher, stating that he did not now whether to admire Kircher 'more for his learning or for his humanity' (Blok, Vossius and his Circle, 154). Blok and Rademaker also conclude that Vossius met Kircher, see Blok and Rademaker, 'Isaac Vossius's Grand Tour', 212. On the museum cf. Mastroianni, 'Kircher e l'Oriente'.

¹⁷ Findlen, 'Un incontro con Kircher', 43. For instance, Kircher sent his book on China to Golius, for which he received rhubarb seeds from the Leiden *hortus*, Golius to Kircher, 11 June 1665, Rome, Pontifica Università Gregoriana, Ms. 562, fol. 139.

¹⁸ Findlen, 'Un incontro con Kircher', 45.

¹⁹ Mastroianni, 'Kircher e l'Oriente', 65.

in a linear whole. This engendered a fundamentally ambiguous scholarship that combined fantasy with observation in a way not entirely alien to Vossius' and Hornius' approach. Their writings met with similar ambivalent reactions that praised their erudition while at the same time poking fun at their far-fetched conclusions.

On the one hand, when the physicist Evangelista Torricelli (1608–1647) visited Kircher in 1641 and was shown some of his automatons, he wrote to Galileo that he and the other visitors had 'had a good laugh'. ²⁰ Baruch Spinoza (1632–1677), after consulting Kircher's writings in the library of Christiaan Huygens (1629-1695), reported that his host sardonically 'praised [Kircher's] piety, but not his ability'. 21 Huygens deemed his work on astronomy 'nothing but a collection of futile nonsense'. 22 The famous Jesuit's philological claims were put to the test when Andreas Müller (c. 1630-1694), who also tried to decipher Chinese, concocted an unintelligible manuscript and asked for his opinion; reportedly, he got an immediate reply that included a translation.²³ In his autobiography, Kircher defended himself extensively against allegations of fraud.²⁴ Vossius too did not hesitate to remark, speaking as Kircher's friend, that 'even his friends wish that he had not written his *Oedipus* [Aegyptiacus]' which contained his claim to have deciphered the hieroglyphs. ²⁵ He also complained about Hornius' dependence on the Oedipus, speaking about 'your Kircher' and ironically calling him 'your equal in philology'.26

On the other hand, some of Kircher's writings held pride of place in the European Republic of Letters, not least his book *China illustrata* (1667) that was published in Amsterdam in two editions and immediately translated into Dutch, French, and English.²⁷ It remained 'the most popular

²⁰ Torricelli to Galileo, June 1641, reprinted in *Opere di Galileo Galilei* XVIII, 332.

²¹ The passage has survived in the correspondence of Henry Oldenburg, cited in a letter of October 7, 1665, reprinted in Wolf, 'An Addition to the Correspondence of Spinoza', 202; *CHO* II, 540–542.

²² Quoted in Haakman, Athanasius Kircher, 181.

²³ Ibid., 126.

²⁴ [Kircher], Vita admodum Reverendi P.A. Kircher, passim.

²⁵ 'Oedipum eius, quem tamen amici nollent ab illo scriptum' (Vossius, *Castigationes*, 41). See also Weststeijn, 'From Hieroglyphs to Universal Characters', and Grafton, above, 76.

²⁶ '[I]ste tuus Kircherus . . . in philologicis prorsus tui similis' (Vossius, *Castigationes.*, 41).

²⁷ Kircher, *China illustrata*, published by J.J. van Waesberge (Amsterdam) and in a pirated reprint by Jacob van Meurs (Amsterdam; some copies have the fictitious imprint Antwerp); translated as *Toonneel van China* (Amsterdam 1668) and *La Chine d'Athanase Kirchère* (Amsterdam 1670); parts of the French translation were included in Rogerius, *La Porte ouverte*; 'Special Remarks Taken at Large out of A. Kircher's Antiquities of China' were published in Nieuhof, *An Embassy from the East-India Company*.

Western European source on China for the remainder of the century'. As missionaries had to report to Rome on a yearly basis, Kircher had better access to information about East Asia than any other European scholar. In the end, the central claim in *China illustrata*, that an inscription from the Tang dynasty proved the existence of Nestorian Christianity in China – which even Hornius deemed a 'Jesuit fraud' – has been proven correct by modern scholarship. ²⁹ Vossius could only try to acquire a similar range of information through his contacts with the Parisian academy of Melchisédech Thévenot (ca. 1620–1692) and through Nicolaas Witsen (1641–1717), governor of the Dutch East India Company (VOC). ³⁰ In spite of religious differences, some Jesuits travelled to China on the Company's ships that also carried their mail, which facilitated scholarly exchange. ³¹ Vossius probably pointed out to Thévenot which books on China from Witsen's large library he should publish; Thévenot, in turn, informed Vossius about his contacts with the Jesuits. ³²

One difference with Kircher was that Vossius' work on China remained a bookish affair. During the entire seventeenth century, no Dutch scholar cared to consult the East Asians who visited the country. Already in 1653 a Chinese named Cheng Ma-no (1633–1673) had come to the Netherlands, in the service of an Italian Jesuit who met Golius in Leiden and Antwerp. He made as little impression as the Chinese traveller Michael Shen Fuzong (c. 1658–1691) who encountered the playwright Joost van den Vondel (1587–1679) in Amsterdam in 1683, or the China-born adventurer Arcade Hoang (d. 1715) who was trained by the Jesuits and lived in Paris for some time.³³ Likewise, when speculating about the nature of Chinese characters, no one consulted two students at Leiden University, sons of the Dutch trade official François Caron (1600–1673) and a Japanese woman,

²⁸ Lach and Van Kley, *Asia in the Making of Europe* III, 474. On Kircher's Chinascholarship see Molina, 'True Lies', Hsia, 'Athanasius Kircher's *China illustrata* (1667)', and Rivosecchi, *Esotismo in Roma barocca*.

²⁹ '[F]raus Iesuitica' (Hornius, *De originibus Americanis libri quatuor*, 277).

³⁰ See the contribution by Eric Jorink earlier in this volume.

³¹ Wills, 'Some Dutch Sources', passim.

³² Peters, Wijze koopman, 48-49.

³³ On Cheng (Portuguese name: Emmanuel de Siquiera) who accompanied Martino Martini to the Netherlands and was possibly the first educated Chinese to be brought to Europe by a Jesuit, see Mungello, *Curious Land*, 108–109. On Michael Shen Fuzong see Peters, *Wijze koopman*, 227. On Hoang see Van Campen, *Jan Theodore Royer*, 66. Eric Jorink kindly informed me about a 1653 letter by Ole Worm, who wanted Cheng to make a translation of a text on a Chinese compass; Ole Worm to Willum Worm, 8 October 1653, *Wormii Epistolae* II, 1016.

who were born and raised in Japan. Another son of a Japanese woman, Pieter Hartsinck (1637–1680), became a distinguished mathematician; he was never consulted by Vossius or any other Orientalist.³⁴

Apparently, China was first of all a topic for those who owned and exchanged books, manuscripts, and other objects. It was a means of showing off the contents of one's library and the range of one's scholarly contacts. This is a first clue to explaining Vossius' interest. By taking a stance on China, he demonstrated his key position in a network of information. By writing about Chinese visual art, he revealed that he had hands-on experience with it via his access to collections such as those of Kircher and Witsen. Such a strategy must have been effective: when Olfert Dapper (c. 1635–1689) began a book on China that would eventually become very popular, he wrote to Vossius with a request for information.³⁵

As it happened, however, China became a focus of interest mainly for the public *outside* academia. Not only was Kircher's *China* translated into the vernacular, but reports of the Dutch trade embassies to Beijing, like those by Dapper and Joan Nieuhof (1618–1672), were reissued in various languages immediately after their initial publication. One reason for this popularity was that the Dutch reports were lavishly illustrated with images apparently done after life.³⁶ Indeed, as far as the wider public was concerned, the most essential aspect of Chinese civilization was the visual arts. Chinese objects were collected in increasing numbers from the second half of the century onwards. Thus it is not surprising that Vossius discussed them in 'De artibus et scientiis Sinarum'. As we shall see, he integrated Chinese art in discussions about painting common among Dutch connoisseurs.

Vossius on Chinese Art

Vossius dwells at length on Chinese visual art; from his utopian outlook he concludes that the splendors of Chinese architecture are so much the

³⁴ It can be assumed the Caron children had some knowledge of Chinese characters. The family had left Japan in 1641; the sons had been born in 1620 and 1634. François junior enrolled at Leiden University on 4 September 1654 as *japonensis*; cf. Kornicki, 'European Japanology', 505; Du Rieu et al., eds, *Album studiosorum Academiae Lugduno Batavae*, col. 438. See also Eric Jorink, above, 140, n. 76.

³⁵ Dapper to Vossius, undated letter, AUB, Ms. RK III E. 10, no. 352.

³⁶ On Nieuhof's drawings and their transmission to print cf. Ulrichs, *Johan Nieuhofs Blick auf China*.

greater because they were built for public, and not for private use. He also discusses Chinese excellence in the art of sculpture, 'as is testified by the giant *Colossi*, the artistry of which is admired by many not without astonishment'.³⁷ This probably echoes the reports recorded by the painter Samuel van Hoogstraten (1627–1678), one of Rembrandt's pupils, who tells of a mountain in Chongqing in the form of a man 'so terribly large, that one can see his eyes, ears, nostrils, and mouth from two miles afar', and a mountain in Yunnan representing a human nose, 'with, flowing out of the nostrils, two fountains, the one cold and the other hot'.³⁸ The art of painting provides Vossius the opportunity to go into more detail. Arguing against those who hold 'the wrong judgment about the painting of the Chinese', he tries to demonstrate that 'in this art, they are equals to the Europeans'.³⁹ He criticizes European painting for its dependence on dark shadows, and praises the Chinese for their clear draftsmanship:

Those who say that Chinese paintings do not represent shadows, criticize what they actually should have praised... The better the paintings, the less shadow they have; and in this respect they are far superior to the painters from our part of the world, who can only represent the parts that stand out by adding thick shadows. The [European painters] obey in this matter not nature, nor the laws of optics. For these laws teach that when any object is put in diffuse light, so that no shadows catch the eye, the aspects that are most close at hand and stand out most must be shown with rather clear lines, but those aspects that are farther away and recede must be shown less distinctly. When someone obeys this rule of painting, his art will emulate nature, and the more outstanding parts will appear to come forward even without conspicuous shadows. 40

Vossius actually praises the Chinese for their failure to represent shadows; ultimately, he disapproves of the use of strong *chiaroscuro* in European art. In his view, spatiality should not be constructed with artificial, exag-

³⁷ Vossius, Variarum observationum liber, 79.

³⁸ Van Hoogstraten, *Inleyding*, 342–343.

³⁹ '[I]n hac arte valent Europaei' (Vossius, Variarum observationum liber, 79).

⁴⁰ 'Cum vero inquiunt umbris fere carere Serum picturas, carpunt quod laudare debuerant. Parce admodum sunt illi in exprimendis umbris, et quidem quanto meliores sunt picturae, tanto minus umbrantur; in quo longe peritiores sunt nostri orbis pictoribus, qui non nisi additis densis umbris partes magis exstantes norunt repraesentare. Qua quidem in re nec naturae, nec optices observant leges; illae nempe docent, si quod corpus aequali fere lumine aspergatur, ita ut nullae conspicuae sint umbrae, partes magis vicinas aut exstantes distinctioribus lineamentis, recedentes vero et remotiores minus distincte esse exhibendas. Hanc si quis in pingendo observet rationem, erit pictura naturae aemula, et etiam absque umbris conspicuis magis exstantes apparebunt partes' (Ibid., 79).

gerated contrasts that are not found in nature, but only with subtly fading contours.

To which 'critics' of Chinese art was Vossius reacting? The most plausible candidate is the German painter Joachim von Sandrart (1606–1688), who worked in Amsterdam from 1637 to 1645 and appears to have owned a sizeable collection of Chinese art. He also moved easily in the Dutch Republic of Letters. He painted, for instance, Gerardus Joannes Vossius' portrait.⁴¹ His views of Chinese painting were embedded in a three-volume treatise, *Teutsche Academie* (1675), that demonstrated profound knowledge of the international tradition of art theory, for example when discussing the works of his main competitor in Amsterdam, Rembrandt.

Von Sandrart writes that from the 'very adventurous' painting of China, he has a great many examples, 'given to [him] by the Chinese themselves', who 'are very experienced in the arts of painting and sculpture, as they are also the most subtle in other arts'. ⁴² In stating this, the German painter appears interested chiefly in Asian women; he owns an image of the concubines of an important noble, 'fulfilling his various wishes', and of a woman who, 'according to the custom of the land', presses her breast so that her child never touches the nipple, lest he develops a large mouth 'which they regard as a very shameful token'. Another of his works shows an actress, 'like there are many among them' who entertain companies for money. ⁴³

Their morals may seem refreshingly liberal, but Chinese painters lack knowledge of certain Western rules of art and techniques, such as oil paint:

They are wont to make these paintings almost without any rule, and only by trusting their deceiving eyes. For they do not want to know anything about the excellent use of oil paint, and nothing about the gradual diminution of the hardness of colors, and how to master it: but they only use water colors mixed with gum.⁴⁴

⁴¹ Joachim von Sandrart, *Gerardus Johannes Vossius*, oil on panel, 1638–1642, AUB, department of Special Collections, Inventory no. 000.071.

⁴² 'So sind doch . . . die Chineser in der Mahl- und Bilderey, gleichwie sie auch in andren Künsten die subtilesten sind, ziemlich erfahren' (Von Sandrart, *Teutsche Academie* I–i, 100). Cf. Sullivan, 'Sandrart on Chinese Painting'; Idem, *Meeting of Eastern and Western Art*, 93–94.

⁴³ Von Sandrart, Teutsche Academie I-i, 100–101.

⁴⁴ 'Sie pflegen aber, fast ingesamt, ohne einige Regeln, und nur nach muhtmaßung ihrer betrüglichen Augen, solche zu verfärtigen. Dann sie wissen nichts von dem vortrefflichen Gebrauch der Oelfarben, auch nichts von temperirung der Härte der Farben, und solche

This criticism seemingly reflects the view commonly held in Europe. Nieuhof's travelogue also mentions that the Chinese are great lovers of art, but 'do not understand how to make shadows... and how to temper their colors with oil. This is the reason why their Paintings appear very dead and pallid, and look more like dead corpses than like living figures'. Likewise Dapper, writing in 1670 about the second and third Dutch embassies, thinks that the Chinese have attained competence only after the Jesuits introduced them to oil. Yon Sandrart repeats Nieuhof's view that 'the exquisite mind that is natural to the Chinese' would have allowed them to overcome these alleged failures, were it not that their Emperor restricted their possibilities for travel. Ultimately, this has led to an inability to render colors that gradually diminish in intensity, which is a means of providing spatiality:

the [Chinese] represent everything simply, only by contours without shadows, they do not give it plasticity as they apply their colors unmixed. They do not know how to make each object stand out, according to its true property, from its neighboring object, whether by making it come forward or by making it recede, or to observe any other thing necessary for lifelikeness – those things that European painters justly tend to observe with the utmost diligence. About those things they know...nothing at all, and their figures are only depicted in profile. To represent portraits full face, in their entirety, is unknown to them.⁴⁸

zu gehorsam zu bringen: sondern sie bedienen sich allein der mit Gummi angemachten Wasserfarben' (Ibid., 100).

⁴⁵ 'Tot de Schilderyen en Schilderkunst, die zy doorgaans veel in hunne kunsten gebruiken, toonen deze volken een groote genegentheit en begeerte: doch mogen evenwel in't maken van eenige uitmuntende kunst-stukken tegen d'Europers geenszins op; want eensdeels verstaanze zich noch niet op 't maken van schaduwen, en ten andre wetenze de kleuren niet te temperen en met olie te mengen. Dit is d'oorzaak waarom hunne Schilderyen zeer doots en bleek zich vertoonen, en veel meer na dode lijken dan levendige beelden zwemen' (Nieuhof, *Gezantschap II*, 30). Nieuhof's verdict echoes that of Nicolas Trigault, *De christiana expeditione apud Sinas*, 22–23.

⁴⁶ Nieuhof, Gezantschap II, 30; Dapper, Gedenkwaerdig bedryf, 504.

⁴⁷ 'Ich halte aber gänzlich dafür, wann diese Leute das ausreisen, aus deren eignen in fremde Länder, nicht verbotten hätten, oder unsere Europäische Mahler zu ihnen kommen ließen, sie würden unfehlbar, durch den von Natur ihnen beywohnenden auserlesnen Verstand, die väste Vortheile dieser Künste bald erfahren und in stattliche Ubung bringen' (Von Sandrart, *Teutsche Academie* I-i, 100). Cf. 'Waarom nu dit volk, dat anders schrander en spitsvondigh genoeg is, zoo dom en onervaren in deze hantwerken is, komt, mijns bedunkens, nergens anders by toe, dan dat 'et noit eenich handel of wandel met uitheemsche volken heeft willen houden' (Nieuhof, *Gezantschap* II, 30).

⁴⁸ 'Sie stellen alles einfältig vor, bloß mit dem Umriß ohne Schatten, rondiren nichts, sondern übergehen ganz schlechthin mit Farben ihre Sachen. Sie wissen nicht, wie, in wahrer Eigenschaft, ein jedes Ding der gebühr nach zu erheben, ob es vor- oder hinter sich zu treiben, oder was für andere notwendige Natürlichkeiten zu beobachten: worauf

This criticism of the Chinese for their failure to make atmospheric transitions reveals Von Sandrart's own preferences: as a painter of the Northern European Baroque, his interests go out to the suggestion of space through tonal and coloristic contrasts. His judgment appears as the perfect opposite of Vossius' praise of the Chinese for their disregard of shadows. In effect, both stances are part of a traditional debate in artistic theory from the Renaissance onwards, which sets painters working primarily with contrasts apart from those working primarily with lines. In the Netherlands, Rembrandt in particular was the subject of this debate.⁴⁹ Even his pupil Van Hoogstraten criticized the master precisely for exaggerating his shadows for spatial effects. Von Sandrart, although he admired Rembrandt's chiaroscuro, suggested that it resulted from the desire to hide his failed draftsmanship.⁵⁰ Vossius' judgment about Chinese art appears as the converse of a commonplace of Dutch connoisseurs about Rembrandt's art: what Chinese painters lack in *chiaroscuro*, they gain when it comes to linear clarity. It is hardly conceivable that this variation on a topical debate was accidental – after all, Rembrandt's etchings were included in a book dedicated to Vossius by Menasseh ben Israel (1602-1657).51

That Vossius' positive remarks are rooted in Renaissance art theory does not mean that they should be dismissed as not based on real knowledge of Chinese works. He may have studied them with Constantijn Huygens (1596–1687), secretary to the Stadtholder and early admirer of Rembrandt. According to a visitor in 1663, Huygens' collection included 'very good paintings and drawings of the dress, idol worship, cities, temples, land-scapes and ships of China, brought along with the last Embassy that the Lords of the States General sent to that country four or five years before'.⁵²

die Europäischen Mahlere billig mit allem Fleiß zu sehen pflegen. Von diesen Dingen allen wissen sie, wie gesagt, gar nichts, und sind ihre Bilder nur in Profil vorgestellet. Die angesichter vorwarts ganz zu repraesentiren, sind ihnen sehr unbekannte Dinge' (Von Sandrart, *Teutsche Academie* I-i, 100).

⁴⁹ Cf. Emmens, Rembrandt en de regels van de kunst.

⁵⁰ Van Hoogstraten, *Inleyding*, 176; Von Sandrart, *Teutsche Academie* I-ii, 326–327.

⁵¹ Israel, *Piedra gloriosa*. Rembrandt did not make copper engravings in this case, as was usual for books, but etchings that only had a small print run. This means that those books in which the illustrations were included must have been collectors' items for Menasseh's most esteemed contacts. The copy from Vossius' library, now in Leiden University Library, has Rembrandt's etchings in the original binding.

⁵² 'Le 8 [August 1663] ie fus voir le matin M. de Zulcon, chez lesquels [*sic*] ie vis force bons tableaux, et des crayons des habits des Idoles, des Villes, des Temples, des Paisages, et des Vaisseaux de la Chine rapportez de la derniere Ambassade, que Messieurs des Estats enuoyeront en ce pays là il y a 4. ou 5. ans' (Monconys, *Journal des Voyages*, 81). It is

Vossius went with Huygens to Thévenot's academy, where he may have expanded his knowledge of Chinese art. But his main informant was probably Witsen, who owned many East Asian statues, paintings, and drawings; some are described in detail in his correspondence.⁵³

Did Vossius own Chinese art as well? Archival evidence reveals the growing presence of Chinese and Japanese art in the Netherlands, especially in the last decades of the century. One example is Christina Swieten, an Amsterdam widow, who owned 'two Chinese paintings' according to the inventory of her belongings drawn up in 1682.⁵⁴ The Dordrecht patrician Cornelis van Herff, who died in 1690, owned thirty-six such works.⁵⁵ These numbers increased among wealthy collectors; Governor General Joannes Camphuys (1634–1686) owned several hundred Chinese and other Asian drawings.⁵⁶ Indeed, various European travelers came to the Netherlands to see Chinese art, such as the German philologist Christian Knorr von Rosenroth (1631–1689), who admired Ernst Roetert's collection in 1663, and the French doctor Charles Patin (1633–1693), who saw Chinese paintings with Jan Witsen (Nicolaas' older brother, 1636–1676) in 1671.⁵⁷

The inventories often list the artworks generically as 'Chinesen', which may refer either to paintings, drawings, or sculptures. In more detail, Simon Schijnvoet's (1652-1727) inventory of 1728 mentions 'Chinese and Japanese drawings, being compositions, figures, landscapes, portraits'. Only once, the name of an artist is mentioned: this is done by Von Sandrart, but he seems to be somewhat misguided, stating that the Chinese regard 'the Indian Higiemondo, who is usually called The Black' as their best artist. This enigmatic figure is hard to identify; Von Sandrart depicts

possible that Monconys does not refer to Chinese products but to chalk drawings made by Dutchmen in China, similar (or even identical) to Nieuhof's works.

 $^{^{53}}$ Peters, 'Mercator sapiens', 367–369 (Appendix V, inventory of Witsen's possessions; not in Peters, Wijze koopman). See also the contribution by Eric Jorink earlier in this volume.

⁵⁴ Inventory 17 February 1682, Stadsarchief, Amsterdam (NAA 2639, film 2665).

⁵⁵ Inventory 17 March 1690, Gemeentelijke Archiefdienst, Dordrecht (ONA 482). Cf. Jan Wijnkoop from Amsterdam who left behind 'two Chinese images, in black frames'; Inventory 11 March 1701, Stadsarchief, Amsterdam (NAA 6216, fols 461–508). These data were taken from the Getty Provenance Index. An exhaustive study of mentions of Chinese and Japanese art in Dutch houses in the seventeenth century has not yet been made.

⁵⁶ Lunsingh Scheurleer, 'Het Witsenalbum', 218.

⁵⁷ Ibid., 213-214.

⁵⁸ Ibid., 216.

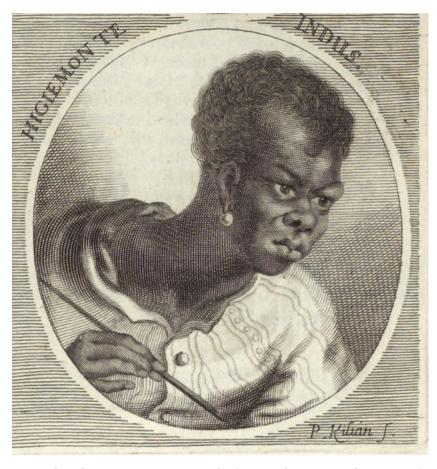


Fig. 1. The 'Chinese' painter Higiemondo, from Joachim von Sandrart, *Teutsche Academie* (Nuremberg 1675), Vol. I, Part II, page 200 (AUB).

him as a black man, with a physiognomy that is not remotely East Asian (fig. 1). 59

Besides collections of artworks, there were two other sources that confronted the Dutch with Far Eastern painting: book illustrations and wallpaper. Dapper's travelogue, for instance, contains three large fold-out images (figs 2–4), reproducing China-made depictions of the philosophers

⁵⁹ 'In besagter ihrer elenden Mahlerey, ward der Indianer Higiemondo, ingemein der Schwarze genannt, wiewol von aller Kunst entfernet, für den bästen Künstler gehalten: dessen wahres Kontrafät hierneben dem edlen Leser vor augen gestellet wird' (Von Sandrart, *Teutsche Academie* I-i, 100; image in I-ii, 200).



Fig. 2. An example of Chinese painting from Olfert Dapper, 'Beschryving van geheel Sina', in: Gedenkwaerdig bedryf der Nederlandsche Oost-Indische Maetschappye op de kuste en in het keizerrijk van Taising of Sina (Amsterdam 1670), facing page 106 (AUB).



Fig. 3. An example of Chinese painting from Dapper, 'Beschryving van geheel Sina', facing page 108 (AUB).



Fig. 4. An example of Chinese painting from Dapper, 'Beschryving van geheel Sina', facing page 110 (AUB).

Confucius and Mencius – did he obtain them through Vossius?⁶⁰ Wallpaper may have been the most common form of Chinese visual art present in the Netherlands, but as it is not listed in inventories and the only surviving material dates from the second half of the eighteenth century, it is hard to establish how generally it was used.⁶¹ In any account, in 1698 a satirical magazine could count on the readers' familiarity with material objects from China, that were apparently associated both with sophisticated draftsmanship and with the most ancient history: a mock inventory listed 'a painting in which twelve mandarins were sketched with a single stroke of the brush' as well as 'the genealogical register of the Preadamites in Chinese characters'.⁶²

On the one hand, Vossius' opinion of Chinese art explored conventional arguments in the tradition of Renaissance art theory. On the other hand, this was the area in which his 'armchair scholarship' allowed him the most

⁶⁰ Dapper, Gedenkwaerdig bedryf, facing pages 106, 108, and 110.

⁶¹ Two rooms with Chinese wallpaper from Guangzhou, probably dating from the second half of the eighteenth century, have remained intact in the estate Oud-Amelisweerd in Bunnik; cf. Van Dam, 'Drakeboot en mandarijneend'. Other material survives from a 'Chinese room' in royal palace Huis ten Bosch, The Hague, decorated with Chinese wallpaper dating from the last quarter of the eighteenth century.

⁶² Haegse mercurius no. 97 (July 9, 1698), pag [3] and no. 103 (July 30, 1698), page [1–2]; quoted from Van Kley, 'Qing Dynasty China in Seventeenth-Century Dutch Literature', 230.

direct experience with Chinese civilization. Indeed, the art objects that were imported in sizeable amounts provided the most essential moment of confrontation and possible 'culture shock' for those who did not travel to China. It is important to note that the discussion in 'De artibus et scientiis Sinarum' was the first defense of Chinese art written by a European, unique in the Early Modern period in preferring Asian aesthetics above that of the West. We will proceed to explore the question why Vossius was so positive, and which ideology framed his remarks on painting. His admiration for the linear quality of Chinese art was connected to a wider discussion of China's 'culture of the brush'. But how did it relate to his vision of sacred history?

Chinese Pictograms and the Primitive Language

The visual arts contributed to a utopian view of China as they inspired speculations about communication by means of images. Chinese writing was thought to have developed from Chinese painting. Samuel van Hoogstraten, Rembrandt's pupil, wrote that the Chinese 'have written their books with meaningful pictures, instead of letters; and their way of expressing themselves has reached us now in the art of painting'. This artist of the 'Golden Age' of Dutch painting was fascinated by the 'culture of the brush' that allegedly characterized classical Chinese civilization. In China, he thought, the art of painting was closely interrelated with scholarship and it was held in great esteem. He compared the Dutch situation, where painters were treated as humble craftsmen, with East Asia where the Emperor, 'whenever he goes out for recreation, has eminent painters among those whom are called his courtiers'.

The linear clarity for which Vossius praised Chinese draftsmanship was thought to be directly related to the graphic nature of Chinese calligraphy, for which, after all, a paintbrush was used. From the fact that the same characters were used in China, Japan, Korea, Indo-China, and Taiwan even though the languages were unrelated, scholars postulated that each

⁶³ 'd'Egyptenaeren, Chinezen...hebben hare boeken met Zinnebeelden, in plaets van letteren, geschreven; en deeze wijze van uitbeelden is met de schilderkonst ook tot ons gekomen' (Van Hoogstraten, *Inleyding*, 90).

⁶⁴ 'Wanneer de Japansche Keyzer zich gaet vermeyen, zoo heeft hy onder de geene, die men zijn gezelschapsheeren noemt, ook treffelijke Schilders' (Van Hoogstraten, *Inleyding*, 356).

Chinese character was a miniature painting of the object it referred to.⁶⁵ Exploring further Vossius' Chinese Utopia, we shall examine how art and language were deemed to be connected.

'De artibus et scientiis Sinarum' claims that the Chinese language guaranteed an uninterrupted cultural tradition of five thousand years, a fact that makes China different not only from Western civilizations but from Persia, India, and the Arabic world as well: their letters are 'very laborious, but the benefit reaped from them is in accordance with the labor, because even if one had learned only [Chinese] characters, one would seem to have accomplished more than if one had acquired knowledge of all languages that exist or have existed'.66 This claim was in fact highly controversial, as it implied that the Chinese script had survived uncorrupted since before the Confusion of Tongues and even the Flood, which supposedly took place in 2349 BC. It was related to Vossius' doubts about the status of Hebrew as *lingua sancta*. As the Hebrew Bible was incompatible with Chinese chronology, Vossius ultimately concluded that the text was unreliable and preferred the Greek Septuagint instead.⁶⁷ His idea of the antiquity of Chinese script was thus the main link between his interest in Chinese civilization and the other topics in the Variarum observationum liber challenging religious authority.

Vossius discussed with Hornius the quest for a *clavis sinica*, a presumed key to this script that was independent of spoken idiom. Hornius was most skeptical, as he ascribed fantasies in Chinese historiography to the difficulty of finding true meaning 'in illa characterum multitudine'.⁶⁸ One source of their dispute may have been Gerardus Joannes Vossius' *De arte grammatica* (1635).

 $^{^{65}\,}$ Kircher, Toonneel van China, 284. See also Weststeijn, 'From Hieroglyphs to Universal Characters'.

⁶⁶ 'Soli in hoc nostro mundo sunt Seres, qui iam a quinque fere annorum millibus perennem et nunquam interruptam conservavere literaturam, illam quidem operosam, sed cuius fructus tanto respondeat labori, cum si quis vel solos ipsorum perdidicerit characteres, plus possit videri profecisse, quam si quis omnium quot sunt quosve [sic, presumably for quotve] fuere linguarum assecutus fuerit peritiam' (Vossius, Variarum observationum liber, 69–70).

⁶⁷ See the contributions by Grafton and Mandelbrote in this volume, above. The Septuagint gives evidence that the world was created in the year 5200 BC, the Vulgate in the year 4004 BC; the deluge was computed to have happened in the years 2957 and 2349 respectively; see Finnegan, *Handbook of Biblical Chronology*, 191 and 184; Weststeijn, 'Spinoza sinicus', 544.

⁶⁸ Hornius, Dissertatio, 54.

Vossius senior discussed Chinese writing in a chapter that also deals with the Egyptian hieroglyphs and cipher scripts. Referring to the Jesuits' observations, he stated that Chinese characters are miniature pictures of things, which results in the fact that:

for the Chinese, there are no fewer letters than there are words: however, they can be combined together, so that their total number does not exceed 70,000 or 80,000... The Chinese and Japanese, although their languages differ just as much as Hebrew and Dutch, still understand one another if they write in this manner. For even if some would have pronounced other words when reading, the concepts would nevertheless have been the same. Indeed, now as people of different languages who see the same thing, understand the same thing, likewise, those who see the sign of a thing would have the same understanding of it.⁶⁹

As Chinese characters express concepts without the medium of language, they are similar to paintings: 'In the same sense, from the painting of a human figure, a horse, a tree or a house, all people obtain the same concept'. 'From the example of Chinese writing, Vossius concluded that it was possible to learn 'as many characters as there are things', if this was done from an early age onwards.'

Not many scholars shared his optimistic views towards learning Chinese, even though his estimate of the total number of Chinese characters was too high.⁷² However, Vossius' idea of pictography would become popular among seventeenth-century utopian thinkers, as it could be used to educate all nations and races on earth in a single, unequivocal manner. A language based on images also seemed to make possible a writing system that reflected the natural 'order of things' more directly than any alphabetic or syllabic script.

⁶⁹ '[P]rodidit Nicolaus Trigaultius..."non pauciores Sinensibus literas esse quam voces numerantur: eas tamen iter inter se componere, ut LXX aut LXXX milia non excedant". Imo idem refert Sinenses et Iapanenses, etsi lingua aeque differant ac Hebraei et Belgae, tamen, quae sic scribuntur, intelligere... Utcumque enim in legendo alii alia verba pronunciassent, tamen iidem fuissent conceptus. Nempe uti nunc variarum linguarum homines rem eandem conspicientes eandem rem concipiunt: ita idem rei signum intuentes, eundem haberent conceptum' (G.J. Vossius, *Grammatica* I, 143). Vossius discusses Chinese writing on 140–143 and 122.

⁷⁰ 'Quomodo ex pictura hominis, equi, arboris, domus, homines omnes eundem habent conceptum' (Ibid., 142).

⁷¹ (T]ot prope characteribus fore, quot res sunt' (Ibid., 142).

⁷² The most complete Chinese dictionary of the seventeenth century, Mei Yingzuo's Zihui of 1615, listed 33,179 characters.

The interest in pictography was related to the Early Modern emphasis on thinking in images (in contrast to the stress on language as the basis for thought so popular in twentieth-century philosophy). When Renaissance writers about the visual arts used the formula 'painting is just like poetry', it was not to highlight the 'textual' nature of works of art, but rather to elaborate on Aristotle's assumption that 'the soul never thinks without images'. 73 The visual basis of mnemotechnics, as well as the rise of the genre of emblematics, were based on this assumption.⁷⁴ It accounted for Leon Battista Alberti's (1404-1472) interest in hieroglyphs, which he thought could be deciphered without knowledge of the language spoken in Egypt. 75 His younger namesake Romano Alberti (1502–1568) mentioned the pictography of the people of the Americas in order to call to mind the original designation of painting as ζωγραφία – writing not based on alphabetic letters, but on living things. 76 Gerardus Joannes Vossius' treatise on painting, 'De graphice' (included in *De quatuor artibus popularibus*, 1650), also resorted to the argument from etymology, explaining how the Greek verb γράφειν meant 'painting' as well as 'writing', to prove that the two activities are closely interrelated.⁷⁷ The visual arts are 'truly universal', concluded a Dutch artist's handbook of 1670, arguing from Kircher's ideas on 'hieroglyphic pictograms' that 'the formation of letters was derived from the art of painting'.⁷⁸

Various scholars developed the idea that images, because they represent nature more closely than language, could be used as 'Real Characters', or signs with universal meaning, just like the numbers in arithmetic and the symbols applied by astrologers to represent the planets, as Vossius

 $^{^{73}\,}$ Aristotle, On the Soul III, 3 (Bekker 431a). See also my 'From Hieroglyphs to Universal Characters'.

⁷⁴ On the 'reading' of emblems, see the overview in Manning, *The Emblem*, 13–36.

⁷⁵ Iversen, Myth of Egypt, 65.

 $^{^{76}}$ '[N]on senza cagione fu dalli Greci la pittura detta ζωγραφία, cioè viva scrittura... Come narra Alfonse de Castro a proposito che la pittura sia viva scrittura a ciascheduno in universale, ancorché idiota, navigando li Spagnoli sotto Carlo Quinto nelle nuove parti occidentali del mondo, ritrovarono che gli uomini di quel paese in luogo di lettere e caratteri talmente dipingevano varie imagini' (Alberti, 'Trattato della nobiltà della pittura', 367).

⁷⁷ Ubi scribere dixit [Statius Papinius] pro pingere, more Graeco, quibus γράφειν utrumque notat; unde pingendi ars iis γραφική vocatur. Ac sic quoque non solum scripta, sed etiam picta, legi dicimus' (Vossius, 'De Graphice', in: De quatuor artibus popularibus, 84).

⁷⁸ '[D]e Letter-making van de Schilderkonst ontleend is... Hieroglyphische Beeld-letteren' (Goeree, *Inleyding tot de practijck*, 25).

senior pointed out.⁷⁹ Francis Bacon (1561–1626) differentiated 'Real Characters' from 'vocal characters', such as letters of the alphabet: 'it is the use of China... to write in Characters Real, which express neither letters nor words in gross, but Things or Notions'.⁸⁰ In his attempt to develop a complete 'Real Language', the philosopher George Dalgarno (1626–1687) addressed 'you far-seeing Chinese': 'do not, we beseech you, render blind us one-eyed ones, anxious as we are to look more intently at your affairs, by displaying enchanting images in place of letters'.⁸¹ To Dalgarno, the validity of these pictograms rested on their antiquity: 'As evidence that *real* characters were in use before *vocal* characters, I may cite the most ancient Chinese and Egyptian peoples'.⁸²

Vossius junior elaborated on the linguistic ideas broached by his father, embedding the perceived antiquity of Chinese script in the larger debate about 'world history'. This had been done for the first time in Kircher's book *Oedipus Aegyptiacus* (1652) that discussed Chinese writing in a chapter devoted to the Egyptian hieroglyphs.⁸³ In *China illustrata* he stated that 'the ancient Chinese have based their letters on all things that present themselves to the eye, and have revealed and expressed the thoughts of their mind solely through the varied combinations and compositions of these things'.⁸⁴ Kircher observed that the Chinese do not write with pens, but with 'paintbrushes'; their writing should rather be termed 'painting'.⁸⁵ His illustration of their *modus scribendi* reinforced this idea: it includes a monkey, the traditional symbol of figurative art as the 'ape of nature' (fig. 5).

⁷⁹ '[Q]uomodo item gentes plurimae conveniunt in notis Arithmeticis, quas cifras vocant: quomodo etiam variarum linguarum Astrologi conspirant in notis planetarum' (Vossius, *Grammatica* I, 142).

⁸⁰ Bacon, The Advancement of Learning, II.xvi.2.

⁸¹ Dalgarno, 'Omnibus quo omnino hominibus (1660)', in: Cram and Maat, George Dalgarno, 121.

⁸² Dalgarno, 'Ars signorum, vulgo character universalis et lingua philosophica (1661)', in: Cram and Maat, *George Dalgarno*, 157.

⁸³ Kircher, *Oedipus Aegyptiacus*, chapter IV, 10–21: 15; Kircher, *Toonneel van China*, 284. Despite his criticism of the *Oedipus*, Vossius praises Kircher's 'ingenuity and erudition'; I. Vossius, *Castigationes*, 41. The similarities between hieroglyphs and Chinese characters were also developed in Spitzelius, *De re literaria Sinensium commentarius*.

^{84 &#}x27;d'[E]erste Sinezen hun merkletteren uit alle de dingen, die zich voor't gezicht vertonen, genomen, en alleenlijk naar de verscheide schikking en ordening dezer samengezette dingen de bevattingen van hun geest geopenbaart en bekent gemaakt hebben' (Kircher, *Toonneel van China*, 275).

⁸⁵ Ibid., 275 and 281.



Fig. 5. An illustration of the Chinese way of writing from Athanasius Kircher, *China illustrata* (Amsterdam 1667), page 233 (AUB).

Supposedly, the mythical first Emperor Fohi invented Chinese pictography at the instigation of a Near Eastern sage, perhaps Noah's son Cham or, most likely, the Egyptian philosopher Hermes Trismegistus who had given the Egyptians their art, their religion, and their hieroglyphs. This was a topical remark; Renaissance art theory stressed that the primeval wisdom taught by Trismegistus had introduced man to the visual arts.⁸⁶ Kircher writes:

The origins of their writing...the [Chinese] learned from Father Cham, and from Mercurius Trismegistus, the counselor to his son Nefraim and the first instigator of pictograms [beeldletteren]. And surely, those ancient characters

⁸⁶ 'Giudica Trimegisto scrittor vecchissimo, che la scultura, e la pittura nascessero insieme con la religione', *La pittura di Leon Battista Alberti*, fol. 18^r; Alberti, *On Painting*, 65; Biondo, *Della nobilissima pittura*, fol. 8^v; Alberti, 'Trattato della nobiltà della pittura', 230; Junius, *The Literature of Classical Art* II, 202 no. 613.

of the Chinese, that are equal to pictograms in all aspects, are an important proof for me to believe in this [Egyptian origin].⁸⁷

The main difference between Egyptian and Chinese, according to Kircher, is that the hieroglyphs were for private use, as a system of polysemic initiatic symbols; by contrast, Chinese writing was developed for public use, indeed to be intelligible everywhere.⁸⁸

The assumption that the Chinese characters could be traced back to the ancient Near East reveals the importance of pictography for Kircher, who believed that it could be used to convert peoples in as yet undiscovered lands. It was one of his key arguments in the debate about sacred history that also inspired the Vossius–Hornius controversy. In his view, the hieroglyphical origin of Chinese writing proved that Buddhism, Brahmanism, and Confucianism were different offshoots from a *prisca theologia*, the 'one primeval religion' that had originated in Egypt and had modern Catholicism as its purest representative. Like Kircher's obelisk on the Piazza Navona in Rome, erected for Pope Innocent X, this was all related to his notion that there had been Christianity before Christ. Philosophers older than Moses, such as Plato and Hermes Trismegistus, were supposed to have spread the *logos* throughout the world. Confucius could be added to their number.⁸⁹

The view of Chinese characters as ambiguous, emblematic signs just like hieroglyphs lay at the basis of the Jesuits' scholarship on Chinese archaeology, religion, and art. It allowed them to interpret oriental ideas and habits typologically as being essentially Christian. 90 This trend of thought, which was called 'Figurism', rendered to the most ancient form of Christianity a multilayered symbolism. The Figurists' argument was that the Chinese did not recognize the hidden hieroglyphic meaning of their own signs: Christian missionaries, trained in the art of emblematics, were needed to rediscover it. Their ambitions were inspired by current

⁸⁷ 'd'[E]erste beginselen der letteren, die zy van Vader Cham, en van Merkurius Trismegistus, raat van zijn zoon Nefraim, en d'eerste insteller van de beeltletteren... geleert hadden. En zeker, deze oude merkletteren der Sinezen, in alles met de beeltletters gelijk, zijn een gewichtig bewijs, daar door ik bewogen word om dit te geloven' (Kircher, *Toonneel van China*, 274).

⁸⁸ The Dutch translation calls the hieroglyphs a *toestel van geheimenissen*, 'concoction of secrets'. Ibid., 282.

⁸⁹ Kircher states that the Egyptians gave the same status to Trismegistus as the Romans to Mercury and the Chinese to Confucius; Mastroianni, 'Kircher e l'Oriente', 69. On Kircher's view of the origin of idolatry, see Stolzenberg, 'The Egyptian Crucible of Truth and Superstition'.

⁹⁰ Cf. Pinot, *La Chine*, 77–86.



Fig. 6. The goddess 'Pussa', from Kircher, China illustrata, facing page 140 (AUB).

views about visual art in Europe. Artistic notions about the 'structural ambiguity' of the visible world, wherein scenes from everyday life might be invested with various moralizing or allegorical meanings, led them to suppose that Chinese thought worked with similar interpretative layers: Fohi would have invented clear pictograms for the simple people, more complex imagery for scholars, and mystical symbols – like the trigrams and hexagrams of *Yi Jing* (or *I Ching*) – for the sages.⁹¹

An Egyptian pedigree was also invented for Chinese works of art; ancient Asian idols were, according to Kircher, of North African origin. After the invasion of Egypt by the Persian king Cambyses, the cult of the prisca theologia had crumbled; émigré Egyptian priests had found a new home in India. Hence, Asian sculptures should be interpreted as imperfect copies of the work of the first artist, Trismegistus. Their polytheistic iconography was the corrupted offspring of the primogenital couple Isis and Osiris. 92 One example, illustrated in Kircher's book, is a hybrid image merging Indian and Chinese elements. According to Kircher's inscription, 'Pussa', or a bodhisattva, equals the Greek nature goddess Cybele 'or Isis of the Chinese' (fig. 6). Seventeenth-century philology was well suited to supply this argumentation with 'proofs'. Gerardus Vossius' De theologia gentili (1641) equated Bacchus and Noah, arguing that their names stem from the same root word. Likewise, a report from the Dutch embassy to Japan referred explicitly to Vossius' derivation of the name 'Apis' from 'Ab' (father) to argue that this Egyptian deity equaled Joseph: further proof that ultimately even Japanese religion was based on Egypt. 93

Hornius, who translated the Dutch travel literature into Latin, added an American dimension to these ideas, building on Kircher's statement that pictograms were similar among the Chinese, Brahmans, and Mexicans, as well as on Gerardus Vossius who, together with his 'very good friend' Lorenzo Pignoria (1571–1631), traced the origin of the Native Americans to Egypt. ⁹⁴ Using pictography as central argument, Hornius' *De originibus Americanis* (1652) stated that the ancient Chinese arrived in Florida because it is, indeed, 'easy to sail the Pacific'. ⁹⁵ He supposed that the dif-

⁹¹ Von Collani, Figuristen der Chinamission, 22.

 $^{^{92}}$ Mastroianni, 'Kircher e l'Oriente', 73; Kircher, *China illustrata*, 151. See also Chang, *Natur und Landschaft*, 84–93.

⁹³ Montanus, Gedenkwaerdige gesantschappen, 252.

⁹⁴ Kircher, Toonneel van China, 273; Hornius refers to Kircher in De originibus Americanis, 229 and 236; Vossius refers to Pignoria as 'amicissimus vir' (G.J. Vossius, Grammatica I, 140). Vossius corresponded with Pignoria, cf. Van der Lem and Rademaker, Inventory, 468.

^{95 &#}x27;[F]acilis navigatio per mare pacificum' (Hornius, De originibus Americanis, 238).

ficulty in learning the great number of Chinese characters – 120,000 or more (!) – had led the Meso-Americans to use simplified characters. Whereas Chinese signs could express abstract notions, American pictograms were merely images of visible objects. ⁹⁶ 'I confess that the way of writing among the ancient Mexicans and the Chinese was not the same, but it was also not very different... The Chinese write with a paintbrush and one character comprises many letters and makes an entire word'. ⁹⁷

Vossius junior was adamant in contesting the pious view that all civilization originated in the logos spreading from the Middle East to the rest of the world. His standpoint was in fact controversial; the Egyptian origin of East Asian religion was generally accepted in Protestant travelogues. 98 Vossius dismissed Hornius' statement that colonists from Egypt went to China as 'absurd'. 99 His adversary replied that, because the Chinese in literature, art, and religion took many things from the Egyptians, 'the opinion of those who state that the Chinese are an ancient Egyptian colony is neither absurd, nor unprovable', referring to Kircher's view that the Egyptians had settlements in Persia and Bactria, and 'from Bactria the road to China is easy and short'. 100 Ultimately, he reproached Vossius for 'having no knowledge of the Chinese language and books'. 101 Hornius thought that their intricate writing system even prevented the Chinese from understanding their own literature: hence the fanciful claims of their historiography. 102 His willingness to accept Kircher's Catholic account of sacred history contrasts with Vossius' stress on the autonomous development of Chinese civilization.

The dispute about the proto-Christian origin of all religion clarifies how Vossius' interest in Chinese art and language was intertwined with

⁹⁶ 'Existimo autem Sinensium scribendi morem apud Mexicanos et Iaponenses paulatim exolevisse propter summam difficultatem. Habent enim notarum CXX millia, ex quibus mediocriter doctum ad LXXX millia nosse opportet. Quid mirum notis illis abolitis alias et faciliores figuras surrogatas? Mexicani quae picturis exprimi poterant, nolebant longo et difficili labore siglis notare' (Ibid., 271).

⁹⁷ 'Fateor non unam scribendi penitus apud Mexicanos et Sinenses rationem, nec tamen penitus diversa fuit...Rubruquis: "Cataini scribunt penicillo pictorio et una figura multas literas complectitur ac verbum facit" (Ibid., 270–271).

⁹⁸ Cf. Montanus, Gedenkwaerdige gesantschappen, 252.

⁹⁹ I. Vossius, Castigationes, 40–41.

 $^{^{100}}$ '[U]t non absurda vel improbanda eorum opinio sit qui coloniam Aegyptiorum antiquissimam Seres statuunt.... Ex Bactriana autem facilis ac brevis in Sinam transitus' (Hornius, *Dissertatio*, 56).

¹⁰¹ Hornius reproaches Vossius 'qui ex solo Martinio sapis et nullam plane Sinicae linguae aut librorum notitiam habes' (Hornius, *Defensio*, 51).

¹⁰² Hornius, Dissertatio, 54.

his biblical criticism. It also reflects the frame of mind that unites the various texts in the Variarum observationum liber. Besides 'De artibus et scientiis Sinarum', the book includes material on the kind of 'world history' proposed by Kircher and Hornius. This related to a corpus of ancient texts, the so-called Sibylline Oracles: De Sibyllinis aliisque quae Christi *Natalem praecessere oraculis.* The 'oracles' were supposedly written by certain 'virtuous pagans', or Sibyls who had foretold the coming of Christ. Traditionally, these prophetesses were associated with foreign locations; Hornius mentioned exotic Sibvls like a Chaldaeic, Persian, Lybian, Erythrean, and Phrygian one. 104 Their geographical spread made the Sibyls into ideal propagators of *prisca theologia*, as Hermetic philosophy had already asserted.¹⁰⁵ Thus the debate over the authenticity of the Sibylline Oracles easily coincided with discussions about the existence of a universal pre-Christian Christianity. In addition, the Sibyls formed not only an important typological link between Old and New Testaments and between classical and Christian civilizations, but also between the Eastern and Western worlds. As a Dutch travelogue stressed, one of the Sibyls must have predicted the European 'discovery' of East Asia. 106 Likewise, the Jesuits used the Sibyls to support their interpretation of Chinese 'natural theology' as a system that was compatible with Christianity: Confucius or other writers, contemporaries to the Sibyls, purportedly prophesied the advent of the True Faith in China. This view, repeated as common knowledge in the travel literature, explains why the missionaries had such exalted notions about the role of philosophers in Chinese society.¹⁰⁷

Writers in the seventeenth-century debate concerning the origin of the Sibylline Oracles took various positions. Some argued that the texts were not genuine ancient documents, while others suggested that they were the work of early Christians. Vossius concluded that the Oracles were an authentic, but solely Jewish creation; modern scholarship supports his idea, regarding the surviving texts as sixth-century compilations of much older works of Jewish origin, including also Babylonian material. Ultimately, Vossius' position contained a twofold argument: he included the Sibyls in the accepted progression of divine history, and simultaneously

¹⁰³ Cf. Katz, 'Isaac Vossius and the English Biblical Critics'.

¹⁰⁴ Hornius, Kerckelycke historie, 20.

 $^{^{105}}$ This is expressed in the popular imagery of Hermes Trismegistus accompanied by the Sibyls (e.g. in the pavement of Siena's Cathedral).

¹⁰⁶ Montanus, Gedenkwaerdige gesantschappen, 15.

¹⁰⁷ Lach and Van Kley, *Asia in the Making of Europe*, 1732; Martini, *Sinicae historiae decas prima*, 131–132; Dapper, *Atlas Chinensis*... *Englished by John Ogilby*, 561–562.

called attention to this history's Judaic, and hence pre-Christian and basically oriental pedigree. 108

Even more wide-ranging speculations concerned the original language in which God had revealed his plans to the Sibyls before they moved to the different continents, in the period before the Flood and Confusion of Tongues. One option that Vossius and his contemporaries had to consider seriously was Chinese. If the historical accounts about the age of the Chinese language were true, it could well have been the language in which God had addressed man in the Garden of Eden when Adam named the animals. ¹⁰⁹ Although Vossius pled for an alternative chronology to replace accepted sacred history, he did not himself draw these ultimate conclusions. However, his account that Chinese letters had remained uncorrupted for five thousand years, and his doubts about the precedence of Hebrew, inspired the architect John Webb (1616–1672) to claim that all languages are essentially derivations from Chinese, in his *An Historical Essay Endeavouring the Probability that the Language of the Empire of China is the Primitive Language* (1669).

Webb – the only seventeenth-century architect whose designs were inspired by Chinese calligraphy – refers extensively to Vossius to argue that the Chinese had letters before the Flood, and that they lived too far away to be guilty of Babel. 110 Suggesting that their script may be older than the hieroglyphs, and presenting it as a model for philosophical efforts to find a 'Real Character', he ultimately argues that the Chinese love and respect their written characters so much that they value them above works of art: 111

The Chinois give willingly great sums of money for a Copy of their antient Characters well-formed, and they value a good writing of their now [sic] Letters far more than a good painting, whereby from being thus esteemed, they come to be reverenced. Insomuch that they cannot endure to see a written paper lying on the ground. 112

¹⁰⁸ Katz, 'Isaac Vossius and the English Biblical Critics'; Israel, *Enlightenment Contested*, 424–425; Buitenwerf, *Book III of the Sibylline Oracles*, 20–21.

 $^{^{109}}$ Perkins, Leibniz and China, 26. On this theme see Marrone, Le lingue utopiche, 85-92.

¹¹⁰ Bold, 'John Webb'; Harbsmeier, 'John Webb'. References to Vossius in Webb, *Historical Essay*, 154–157, 175–176, 188.

Webb, Historical Essay, 169 and 187.

¹¹² Ibid., 177.

Apparently, Vossius' view of Chinese history could have wide-ranging implications. Kircher and Hornius took the safe route, planting Chinese civilization on the grounds of proto-Christian *prisca theologia* and stating that Noah's son had brought the Chinese their language three centuries after the Flood. By contrast, Vossius' praise of China's art above that of Europe and his claim about the antiquity of its script had the same effect as his conclusions about the origin of the Sibylline texts: they strengthened his reputation as a religious quarrelmonger and eventually put other scholars on even more controversial paths.¹¹³

The discussion of Chinese art and language had one final chapter that eclipsed even Vossius' Utopia in its vision of a civilization with perfect and complete knowledge. China as the place where *philosophia perennis* had been conserved in its pristine form inspired speculation that pictography was a key to natural philosophy. The way the Chinese represented knowledge through a combination of images was believed to reveal the structure of reality itself, the 'order of things' established by God in the act of Creation.

In China illustrata, Kircher already developed the view that Emperor Fohi based his characters on objects related to fire (dragons), air (birds), water (fishes), and earth (plants), as well as on other elements distinguished by the Chinese (figs 7-11).¹¹⁴ This association of pictograms with physical categories could be extended to more abstract philosophical ones, as was explored further in his Polygraphica (1663) and Ars magna sciendi (1669). Thus Kircher's alphabeta artis lists various symbols that index argumentative combinations, such as a heart for 'concordance' and an omega for 'conclusion'. It includes small images of a man, an animal, a tree, and a stone to denote the categories of the natural world, and even a little angel to denote anything related to 'angelic' intelligence (figs 12–13). As early as 1666, Leibniz, one of Kircher's correspondents, called Chinese pictography a source of inspiration for his study of logic. 115 As he was convinced that 'the Chinese script was arranged not on the word but on the thing', it inspired his plan for an 'exact language, like the one called Adamitic by some...in which the ideas were reduced to a kind of alphabet of human thought, [so that] all that follows rationally from

¹¹³ For some of Vossius' critics see Katz, 'Isaac Vossius and the English Biblical Critics'.

¹¹⁴ Kircher, Toonneel van China, 275.

¹¹⁵ Perkins, Leibniz and China, 42; cf. Widmaier, Leibniz' Zeichentheorie.

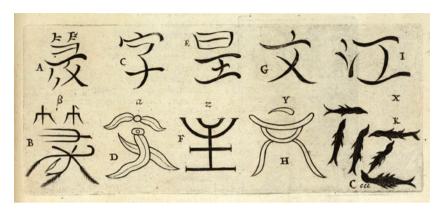


Fig. 7. Examples of Chinese characters (on the upper row) and their purported origin in pictograms (on the lower row), from Kircher, *China illustrata*, page 223 (AUB).



Fig. 8. The characters invented by emperor Fohi, from Kircher, *China illustrata*, page 228 (AUB).



Fig. 9. Ancient characters based on pictograms of herbs and bundles of leaves (left) and birds (right), from Kircher, *China illustrata*, page 230 (AUB).



Fig. 10. Ancient characters based on pictograms of fishes (right); inscription 'forbidden to lend or borrow money' (left), from Kircher, *China illustrata*, page 232 (AUB).



Fig. 11. Ancient characters based on pictograms of plants and stars, forms from ancient edicts and others, from Kircher, *China illustrata*, page 231 (AUB).



Fig. 12. Title page of Athanasius Kircher, *Ars magna sciendi* (Amsterdam 1669) (AUB).

Columna prima. Alphabetum primum Erotematicum.	Columna fecunda. Alphabetum principiorum absolutorum.	Columna tertia. Alphabetum principiorum re- spectivorum.	Columna quarta. Alphabetum principiorum uni- versalium.
1. An. 2. Quid. 3. Cur. 4. Quantum. 5. Quf. 6. Quale. 7. Ubi. 8. Quando. 9. Quibufcum.	1. B. Bonitas. 2. M. Magnitudo. 3. D. Duratio. 4. P. Potentia. 5. S. Sapientia. 6. Vo. Voluntas. 7. Vi. Virtus. 8. Ve. Veritas. 9. G. Gloria.	1.	1. Deus. 2. Angelus. 3. Cœlum. 4. Elementa. 5. Homo. 6. Animalia. 7. Se Plantæ. 8. Mineralia & omnia mixta. 9. Materialia; Inftrumentalia.

Fig. 13. 'Alphabeta artis', from Kircher, Ars magna sciendi, page 24 (AUB).

what is given could be found by a kind of calculus'. ¹¹⁶ Because their script disclosed how the Chinese organized their excellent knowledge of natural philosophy, breaking its code could contribute to insights in epistemology as well as in ontology. ¹¹⁷

The 'alphabet of human thought' that Leibniz associated with Chinese pictography was not identical to modern symbolic logic, as it was intended for the classification of encyclopedic learning and not for revealing any 'deep structure' within language itself. His quest for an *ars combinatoria* based on Chinese writing, a notation system that reduced knowledge to combinations of a set of universal ideas, proved a dead end. When Leibniz studied the signs used in the *Yi Jing* (or *I Ching*), his ideas were equally misguided – he thought they were Fohi's 'hieroglyphs' representing the Infinite and the Chaos from which God had rescued mankind. However, the binary combinations that he thought he had revealed became a source of inspiration for his own ideal language: 'a new *characteristica* which will appear to be a continuation of Fohi's, and which will provide the beginning of the analysis of ideas and of that marvelous calculus of reason that I

¹¹⁶ Leibniz, *Sämtliche Schriften und Briefe*, Series I, Vol. II, 491; Leibniz, 'Scientia Generalis; Characteristica (1679)'; translation from Mungello, *Curious Land*, 192.

 $^{^{117}}$ On Leibniz's ideal of an $ars\ combinatoria$ reflecting the structure of reality, see Westerhoff, 'Poeta calculans'.

am planning'.¹¹⁸ This 'universal characteristic' catalyzed the development of modern symbolic logic.¹¹⁹

Ultimately, utopian ideas on China as the 'philosopher's republic' merged with its reputation as a 'culture of the brush': pictography, a language that unequivocally revealed the order of nature, would put an end to disputes. Jan Amos Comenius (1592–1670) concluded that the 'Real Character' would lead to a harmonious world order, just like the educational system based on images outlined in his *Orbis pictus* (1658). Observing that 'the symbolic characters used by the Chinese . . . help men of different languages to understand one another', he developed a plan for 'the discovery of a Real Language . . . and of the truth of things themselves at the same time'. ¹²⁰ As late as 1730, a fictitious travel account entitled *Le Nouveau Gulliver* situated in China a utopian island called 'Babilary', which was ruled by women and used a universal script based on pictography. ¹²¹

It is not hard to see why Chinese art and language appealed to scholars like Vossius. Chinese characters, just like the hieroglyphs, presented a great challenge to European philologists precisely because nobody fully understood them. Their intractable nature made any connection with 'hidden' or 'lost' ancient lore seem almost self-evident. As pictography was a central topic in the new sciences of 'world history' and universal language, the *clavis sinica* was expected to benefit trade, religion, and philosophy.¹²²

These ideological expectations encountered criticism from orthodox Protestants. For example, the Frankfurt professor of logic Elias Grebnitz (1627–1689) attacked Chinese language as a product of the devil. He thought that every time the name of God would be written in Chinese, one would commit a sin against the Second Commandment that prohibits

¹¹⁸ Leibniz to Bouvet, quoted in Walker, 'Leibniz and Language', 447. See also Perkins, *Leibniz and China*, 42; Sun, 'Leibniz, les symboles I Ching et les idéogrammes', and Porter, *Ideographia*, 55–57.

¹¹⁹ Leibniz' logic is often seen as a forerunner of digital electronics. Before turning our attention to modern science, however, we should note that Leibniz became fully involved in the same issues that occupied Vossius, including the discussion on Chinese chronology, cf. Li, 'Leibniz, der Chronologiestreit und die Juden in China'.

¹²⁰ Comenius, *The Way of Light*, 186–189. Comenius aspired to visit Gerardus Vossius whose work he admired; cf. Rademaker, *Vossius*, 280.

¹²¹ Guyot-Desfontaines, Le Nouveau Gulliver ou Voyages de Jean Gulliver fils du capitain Gulliver.

 $^{^{122}}$ Cornelius, Languages in Imaginary Voyages, chapter IV, and my 'Pictography and Utopianism'.

the depiction of the Divinity. Another Protestant, Andreas Müller, made a *Typographia Sinica*, the largest of its kind in Europe, with types of over three thousand signs. Soon Leibniz wrote to him asking whether 'this language can be introduced easily and beneficially in Europe, whether those who constructed this language understood the nature of things and were highly rational'. But when Müller finally found the clavis sinica, that was a key to the hieroglyphs at the same time, he was accused of heresy; in the hour of his death, he threw his materials into the fire. Similar allegations were leveled at Vossius as a defender of Chinese Utopia. One of Müller's critics, the abbé Eusèbe Renaudot (1646–1720), placed Vossius' writings firmly among those of 'Libertines, spoiled by a false metaphysics'. He accused the Dutch scholar of finding 'proofs in the ancient authors to substantiate everything that he read or heard about the Chinese', in order to concoct ideas that would 'lead to nothing less than a total subversion of all Religion'. 125

Conclusion

Vossius' praise of Chinese art and language in 'De artibus et scientiis Sinarum' fits into the framework of his vision of sacred history. His wish to endorse the Chinese historians inspired him to extol their art above that of Europe and to conclude that the specific nature of the Chinese characters guaranteed a pre-Babylonian and even antediluvian tradition of knowledge.

His text was an early symptom in the taste for things Chinese that would soon take Western Europe by storm. Vossius' interest in material culture and his utopian vision eventually gained wide acceptance. As the number of art objects from China pouring into European collections increased, the desire for factual information became stronger as well. At the beginning of the eighteenth century, Witsen and his circle apparently looked at Chinese visitors for the first time with genuine interest, inviting the travelling

¹²³ Lach, 'The Chinese Studies of Andreas Müller', 573.

¹²⁴ Peters, *Wijze koopman*, 287; Lach, 'The Chinese studies of Andreas Müller', 573. On this scholar cf. Noack, 'Andreas Müller'.

¹²⁵ 'M. Vossius...trouvoit des preuves dans les Auteurs anciens, pour soutenir tout ce qu'il lisoit ou entendoit dire sur les Chinois. Enfin sur de pareilles autoritez, des libertins gastez par une fausse métaphysique ont respandu des opinions qui leur ont paru nouvelles quoyque la plus part soient des anciens Philosophes ou des Heretiques des premiers siècles, et qui ne vont pas à moins qu'à un renversement général de toute Religion' (Renaudot, *Anciennes relations*, xxxviii–xxxix).

doctor Chou Mei-Yeh to translate Confucius.¹²⁶ This scholarly concern for China had less impact, however, than a surge in ill-informed imagery of the Far East: the *Chinoiserie* that became very popular, not only among scholars but among the lower classes of society too. This increase in trade did not necessarily entail greater factual clarity. For one thing, many of the items collected were prepared in China especially for the expanding European market and they often reflected more about the Chinese conception of European taste than about Chinese art itself.¹²⁷

When it came to the 'Real Character', from a practical point of view, Gerardus Vossius' remark that a pictographic language would require learning a multitude of signs discouraged linguists and philosophers; Dalgarno complained about the 'near infinitely burdensome' number of Chinese characters. Up to the eighteenth century, however, serious attempts were undertaken to trace the Chinese language back to Coptic: this was inferred from the (in itself correct) assumption that the language expressed in the Egyptian hieroglyphs was Coptic. 129

Still, Vossius' utopian 'democratic empire' ruled by a philosopher-king lived on in the popular imagination. The widespread imagery of a society in which all Chinese lived peacefully in their beautiful, timeless gardens gave visual form to the common idea that these happy people had perfect understanding of the order of nature. The political and cultural unity exemplified by China became the metaphor for everything absent from European places torn by religious, political, and scholarly strife. This image presented China's political philosophy as indissolubly intertwined with its 'culture of the brush'; as one historian wrote about the intellectual climate of the early eighteenth century, 'soon everyone was proclaiming the wisdom of Confucius, or extolling the virtues of a Chinese education, or painting in what they took to be the Chinese style, or building Chinese pagodas in gardens landscaped in the Chinese manner'. 131

Was Vossius' Chinese Utopia just 'a subversive strategy within Western intellectual debate', to return to Israel's interpretation: a rhetorical ploy to undermine accepted authority? It is true that Vossius' scholarship

¹²⁶ Blussé, 'Doctor at Sea', 27, n. 10, cites further material on Chinese visitors to seventeenth-century Europe; cf. Peters, *Wijze Koopman*, 253.

¹²⁷ Cf. Porter, *Ideographia*, 133–192.

Dalgarno, 'Character universalis (1657)', in: Cram and Maat, George Dalgarno, 85.

 $^{^{129}\,}$ This was done by Maturin Veyzière de la Croze, court librarian in Berlin, cf. Peters, Wijze koopman, 285–287.

¹³⁰ Cf. Ramsey, 'China and the Ideal of Order'.

¹³¹ Commager, The Empire of Reason, 62.

may have raised the eyebrows of the reactionaries of his age and that he met Spinoza. 132 The manifold associations that surround Vossius' ideas on China suggest, however, that a 'subversive' philosophical agenda was simply not the full story. As Donald Lach stated, 'never before had Europe received so powerful and varied an artistic stimulus from a distant civilization'. 133 'De artibus et scientiis Sinarum' was a means of showing off cutting-edge scholarship: this most topical area of discussion called for the abandonment of widely held convictions about art and language. In effect, it required prodigious feats of the imagination to conceive of Chinese civilization at all. Imagination, it is safe to say, was one faculty with which Vossius was to be trusted in his capacity as a 'pocket-sized Kircher', to use Karel Davids' term (above, 206). Whereas Kircher's writings were inspired by the aims of the propagation of the True Faith – to plant the Jesuit flag in the farthest corners of the earth, as well as on the beginnings of its history – Vossius' ambitions were more personal. The 'emancipation of man', to quote the title of Israel's book, was something he cared less about than his own reputation as a mind able to encompass anything remotely conceivable.

¹³² Vossius did not discuss radical philosophy with the Amsterdam philosopher: tellingly, they talked of alchemy. Jelles to Spinoza, 25 March 1667, Spinoza, *Briefwisseling*, 260.

¹³³ Lach, 'China in Western Thought and Culture', 363.

ISAAC VOSSIUS, ENTRE PHILOLOGIE ET PHILOSOPHIE

Colette Nativel

La personnalité d'Isaac Vossius est tout à fait étonnante. Très tôt le caractère exceptionnel de cet érudit doué d'une activité et d'une curiosité inlassables fut applaudi. La biographie que donne Jacques-George de Chaufepié dans le *Supplément au Dictionnaire historique et critique* de Pierre Bayle en témoigne.¹ Sa correspondance montre qu'il entra dans la République des Lettres alors qu'il n'était encore qu'un tout jeune homme. Sa bibliographie, enfin, qui mêle les éditions, les annotations, les commentaires d'ouvrages antiques aux recherches historiques, mathématiques ou scientifiques, son éducation, sa pratique des langues anciennes – dont l'hébreu – le placent encore dans la grande tradition polymathe humaniste. Mais en même temps on peut se demander si Vossius peut encore être considéré en tout point comme un humaniste ou un 'antiquaire'.

La question se pose lorqu'on découvre que l'humaniste hollandais Johannes Georgius Graevius (1632–1703) publia deux de ses textes dans le Thesaurus antiquitatum Romanarum.2 Il s'agit du De antiqua urbis Romae magnitudine, publié dans le volume IV, et de la De triremium et liburnicarum constructione dissertatio, dans le volume XII, les deux textes étant accompagnés de figures. Le Thesaurus antiquitatum Romanarum de Graevius, comme d'ailleurs le Thesaurus Graecarum antiquitatum de son ami Jacobus Gronovius (1645–1716) – un Hollandais également – est une somme impressionnante. Publié à Utrecht entre 1694 et 1699, il ne comporte pas moins de 12 volumes in-folio. Il constitue, avec le Thesaurus de Gronovius, une sorte d'encyclopédie de la civilisation antique; chaque volume, organisé de façon thématique, est composé d'une anthologie des textes que l'humanisme a laissés sur la question développée. Il représente aussi une sorte d'état de la recherche dans ce domaine, à un moment qu'on peut considérer comme la fin de l'humanisme. Si l'on prend comme exemple le seul volume IV auquel appartient le De Romae magnitudine, on voit que les auteurs modernes choisis vont de l'érudit italien Pietro Angeli (1517–1596), auteur d'un *Commentarius de obelisco*, qui date de 1586,

¹ Chaufepié, Nouveau dictionnaire historique et critique IV, 614-631.

² Graevius, Thesaurus antiquitatum Romanarum.

et d'une *De privatorum publicorumque aedificiorum urbis Romae eversoribus, epistola ad Petrum Usimbardum*, publiée en 1589, à des contemporains de Vossius, comme Giovanni Pietro Bellori (1613?–1696) ou Ole Borch (1626–1690), un érudit médecin des rois de Danemark, Frédérick III et Christian V, chimiste, botaniste, philologue, professeur et bibliothécaire.

Le choix et les regroupements de ces textes, leurs amputations parfois mériteraient une étude précise. Pour en rester à notre volume IV, il présente la topographie de Rome, ses monuments, ses acqueducs et beaucoup d'autres sujets. Je ne me livrerai pas à une énumération fastidieuse. Je soulignerai seulement que les contenus de chaque volume soulèvent à eux seuls tout le problème de la conception de l'histoire par les humanistes. Ce sont les notions mêmes d'antiquité et d'histoire qui sont questionnées par l'encyclopédie de Graevius.

C'est dans ce cadre que s'inscrivent les chapitres des deux essais d'Isaac Vossius publiés par Graevius.³ Vossius les avait fait paraître une dizaine d'années auparavant, en 1685 à Londres, dans son *Variarum observationum liber*. Ce volume de miscellanées suscite une première série de remarques du même ordre que celles que nous avons faites à propos du *Thesaurus*. L'assemblage de ces textes semble en effet d'abord incohérent. Un traité sur la grandeur de Rome et de certaines villes ('quarundam urbium') – Graevius n'en a conservé que ce qui concernait Rome – un autre sur les arts et les sciences des Chinois, sur l'origine et le progrès de la poudre à canon en Europe, sur la construction des trirèmes et des liburnes, sur la correction de la longitude, sur l'ouverture de voies de navigation vers le Japon et les Indes par le Nord, sur les cercles qui apparaissent sur la lune, sur la gravité et encore un autre sur les Sybilles et les oracles qui précédèrent la naissance du Christ, enfin les réponses aux objections du père Simon.

En fait, l'ouvrage est constitué de deux grands ensembles. Une série d'enchaînements ménagés entre les trois premiers traités donne son unité

³ L'admiration de Graevius pour l'ensemble de l'ouvrage s'exprime dans la lettre qu'il fit parvenir à Isaac, le 31 août 1685: 'Vereor ne ingrati hominis crimen apud te subierim, qui tam diu gratias tibi debeo pro tuis illis observationibus, quibus nihil praestantius haec aetas vidit. Quas qui non admiratur, is equidem aut tam stupidus est ut non intelligat quid sit admiratione dignum, aut tam maligno et ieiuno animo ut pulcherrimarum rerum splendor, non tam admirationem quam dolorem ei moveat. Ego tamen illas non miror, qui novi divinitatem ingenii tui, quod nihil potest parere nisi quod abstrusissimum, et non solum a vulgi sed et eruditissimorum hominum intelligentia procul sit remotum, quodque praeter te solum nemo nos docere queat. Sed haec apud alios malo, quam apud te qui aeque invitus tuas laudes, cum sis supra omnes evectus, audis, ac hominum insanorum reprehensiones irrides' (Chaufepié, Supplément IV, 629).

au premier ensemble. Par sa composition générale et par la nature de ses textes, cet ensemble témoigne d'un art de la digression propre à la pensée humaniste. Cet art de la digression n'est pas centrifuge, il est centripète, il ne consiste pas à s'éloigner de son sujet, il vise à intégrer dans celui-ci le plus d'éléments possible. Ainsi le 'De antiquae Romae et aliarum quarumdam urbium magnitudine' finit par un chapitre consacré à la taille des villes chinoises et il est suivi du 'De artibus et scientiis Sinarum', qui comprend un développement sur l'histoire de la médecine et de la circulation sanguine - Vossius abordant la question de la médecine chinoise -, sur la chimie, puis les arts mécaniques, sur l'architecture, la musique, la peinture, la statuaire, sur le théâtre, la boussole, l'imprimerie et son antiquité, et enfin la poudre à canon, ce qui permet à notre auteur de rebondir en traitant 'De origine et progressu pulveris bellici apud Europaeos'. 4 On passe alors, sans transition au 'De triremium et liburnicarum constructione', un commentaire d'un passage de Vitruve (1, 2, 4). Vossius se livre, à propos de la construction des trirèmes, à de savants calculs qui mériteraient d'être étudiés de près. C'est de mathématique encore, appliquée à la géographie, qu'il se sert dans le 'De emendatione longitudinum', le 'De patefacienda per septentrionem ad Japonenses et Indos navigatione'. Puis, il traite d'astronomie dans le 'De apparentibus in luna circulis' et de physique dans le 'Diurna telluris conversione omnia gravia tendere ad medium'.

Le dernier traité constitue à lui seul le second ensemble et occupe près de la moitié du volume (208–297). Il est d'une nature bien différente puisqu'il s'agit de critique biblique. Vossius réédite ici le *De Sibyllinis aliisque quae Christi Natalem praecessere oraculis*, déjà publié en 1679, qui avait été mis à l'Index, comme plusieurs autres de ses volumes, en le complétant de réponses aux objections qu'avait formulées un oratorien français, le père Simon ('Ad priores et posteriores P. Simonii obiectiones responsio').⁵

Comme dans les *lectiones* humanistes, l'analyse se fonde le plus souvent sur une lecture critique des textes, selon une méthode issue de la

⁴ Sur cette partie des *Variarum observationum liber*, Weststeijn, '*Spinoza sinicus*', 548–550.

⁵ Sur Richard Simon (1638–1712), auteur d'une *Histoire critique du Vieux Testament* et d'une *Histoire critique du texte du Nouveau Testament*, Steinmann, *Richard Simon*; Auvray, *Richard Simon*; Woodbridge, 'Richard Simon'; Champion, 'Acceptable to Inquisitive Men'; Fleyfel, 'Richard Simon'. Sur le rôle de Vossius dans la polémique autour de ses livres en Angleterre: Katz, 'Isaac Vossius and the English Biblical Critics'; Champion, 'Richard Simon and Biblical Criticism'. Le Père Simon avait attaqué le *De Sibyllinis oraculis* dans des *Disquisitiones criticae*. Voir la contribution de Scott Mandelbrote dans le présent volume.

philologie qu'Isaac, formé par un père rigoureux et par Claude Saimaise, connaît bien pour l'avoir pratiquée dès son jeune âge en préparant ses éditions d'auteurs anciens. Ainsi, dans le traité sur les trirèmes, il se livre à une savante analyse du mot *interscalmium* (l'espace entre deux rangs de rameurs) mal compris selon lui par les lecteurs de Vitruve.⁶

Mais en même temps on constate que la démarche d'Isaac Vossius n'est plus tout-à-fait celle de la génération précédente. Nous prendrons un seul exemple, celui du chapitre sur 'la grandeur de la Rome antique et de certaines autres villes' qui nous conduit d'un exposé sur l'étendue de la Rome antique à la démographie de quelques grandes villes du XVII° siècle.

Pour établir cette superficie, Vossius s'appuie sur la longueur des murailles et cite ce passage de Pline (*Histoire Naturelle* 3, 66–67):

Ses murailles ont atteint, sous les empereurs Vespasiens et pendant leur censure, l'an 828, un développement de 30 000 pas. Embrassant sept collines, elle est divisée en quatorze régions. Leurs carrefours sont deux cent soixante-cinq. De la colonne milliaire placée à l'entrée du Forum romain jusqu'à chacune des portes, qui sont aujourd'hui au nombre de 37, si on ne compte que pour une chacune des douze portes [doubles] et qu'on passe les sept anciennes qui n'existent plus, on a, en droite ligne, 30 765 pas. De la même colonne milliaire jusqu'aux dernières maisons, y compris le camp des Prétoriens, en suivant les rues attenant à toutes les grandes voies, on compte un peu plus de 70 000 pas.⁷

Il est remarquable qu'il ne précise pas l'édition ou le manuscrit qu'il a consulté – alors que possesseur de nombreux manuscrits de l'*Histoire Naturelle*, il n'ignore pas les multiples variantes du texte plinien. Or les éditions contemporaines de Vossius, comme les nôtres d'ailleurs, proposent des chiffres très sensiblement différents. Si l'on se reporte à l'édition 'cum notis variis' de 1669, on constate que Pierre Chifflet avance DCCCCXXII pas et Gronovius DCCCCXXVIII pas.⁸ On est loin de la longueur de 30 000

⁶ Vossius, Variarum observationum liber, 95–124.

^{7 &#}x27;Moenia eius collegere ambitu imperatoribus censoribusque Vespasianis anno conditae DCCCXXVIII, pass[uum] XXX m[illia]. Complexa montes septem, ipsa dividitur in regiones quatuordecim. Compita earum CCLXV. Eiusdem spatii mensura currente a milliario in capite Romani fori constituto ad singulas portas, quae sunt hodie numero triginta septem, ita ut duodecim portae semel numerentur, praetereanturque ex veteribus septem, quae esse desierunt; efficit passuum per directum XXX M. DCC LXV. Ad extrema vero tectorum, cum castris praetoriis ab eodem milliario per vicos omnium viarum mensura colligit, paulo amplius septuaginta millia passuum' (Vossius, Variarum observationum liber, 3).

⁸ Voir la bibliographie.

pas que donne Vossius, qui, de surcroît, suppose que la partie de la cité située le long du Tibre était dépourvue de murailles.

Et Vossius ajoute avec une belle assurance, mais toujours sans référence précise aux éditions ou aux manuscrits qu'il a utilisés:

C'est la leçon presque constante des livres anciens, si ce n'est que dans les imprimés et dans les manuscrits de loin plus nombreux écrits à la main, dans la première proposition, ce ne sont pas 30 000 pas, mais 13 200 qui apparaissent.⁹

Il serait gênant d'ignorer l'édition de Pline sur laquelle Vossius se fonde, si justement il ne remettait pas en cause ce texte, avec une argumentation en elle-même ingénieuse, même si le résultat est faux. Il explique en effet la variété des leçons concernant la longueur des murailles par le fait que les copistes auraient altéré le texte en substituant aux mesures données par Pline celles de leur époque.

On ne doit pas chercher la raison de cette variation...ailleurs que dans le fait qu'à l'époque de Théodose et ensuite il ne manqua pas de gens qui corrompirent les exemplaires de Pline et qui, sans tenir compte de leur auteur, substituèrent aux mesures anciennes les mesures de leur époque.¹⁰

Il n'étaye cependant pas cet argument sur des exemples précis.

Critiquant le chiffre de 4 millions d'habitants avancé par Juste Lipse dans les *Admiranda*,¹¹ Isaac Vossius utilise ensuite la longueur des murailles pour évaluer la superficie de la ville et calculer la population qu'elles contiennent, laquelle s'élèverait à 14 millions d'habitants:¹²

⁹ 'Haec est constans fere veterum librorum scriptura nisi quod et in vulgatis, et in longe pluribus manu exaratis codicibus in primo commate non XXX. M. sed vero XIII. millia et CC insuper exhibeantur passus' (Vossius, *Variarum observationum liber*, 3–4).

¹⁰ 'Huius autem varietatis... non aliunde petenda est causa, quam quod tempore Theodosii et postea non defuerint complures qui Plinii exemplaria depravarunt et nulla scriptoris habita ratione, suorum temporum mensuras pro mensuris substituerunt veteribus' (Vossius, *Variarum observationum liber*, 4).

¹¹ Lipsius, Admiranda, 110.

¹² Sur les études récentes concernant la population de la Rome antique et les débats qu'elle soulève encore, voir Corvisier, 'L'état présent de la démographie historique antique'. On considère que c'est Karl Julius Beloch (1854–1929), qui, à la fin du XIX° siècle, initia la démographique historique (voir en particulier *Die Bevölkerung der Griechischrömischen Welt*). Selon cet auteur, à l'époque d'Aurélien, Rome comptait entre 800 000 et 900 000 habitants à l'intérieur du mur d'Aurélien, un million avec les faubourgs. Ce chiffre a récemment été revu à la hausse par Lo Cascio, 'Size of Roman Population'. Voir aussi Lo Cascio, *Roma imperiale*.

Or si nous voulons mesurer la grandeur de Rome non pas au nombre de ses citoyens, mais à l'ampleur de ses murailles, nul doute que c'est sous Auguste qu'elle fut de loin la plus grande. 13

Vossius trouve un second argument pour défendre cette évaluation dans les chiffres du cens, dont il dresse un tableau à partir d'éléments relevés chez les historiens.

Son troisième argument s'inscrit dans une démarche comparatiste qui s'est développée depuis la fin du seizième siècle. Lipse, dans le *De magnitudine*, comparait la population de la Rome antique à celle de l'Alexandrie antique ou à celle de la Rome moderne. Vossius, pour établir la taille et la population de Rome, la compare aussi à d'autres villes anciennes ou contemporaines: Babylone, Ninive, Thèbes en Égypte, Alexandrie et Carthage, le Caire et Babylone, puis les villes de Chine. A ce propos, il associe l'importance de la population au bon gouvernement:

Comme il n'est pas de signe plus certain d'un bon régime que l'abondance et la fréquence des grandes villes, il n'y a pas lieu de s'étonner des vastes villes des Chinois. Si nous considérons leur ampleur, nous trouverons qu'elles ont dépassé en grandeur les cités de tous les autres peuples, tout comme les Chinois eux-mêmes furent toujours supérieurs à tous les mortels dans l'art de gouverner. Je ne parle pas ici de l'état et de la condition présents des Chinois, après que leur État, corrompu par la faute de mauvais princes et magistrats, est devenu la proie des barbares, et que tout ce qui est fait chez eux a décliné, mais d'un temps plus heureux, où ils obéissaient à des rois qui étaient seulement de leur race, qui, s'ils n'étaient pas toujours bons, étaient cependant rarement mauvais au point de ne servir que leurs vices au mépris du soin du gouvernement.¹⁶

¹³ 'At vero si magnitudinem Romae non civium numero, sed laxitate moeniorum metiri velimus, nullum est dubium quin sub Augusto longe fuerit maxima' (Vossius, *Variarum observationum liber*, 32).

¹⁴ Sur les débuts du comparatisme, voir Detienne, *Comparer l'incomparable*, 134 et Idem, 'L'art de construire des comparables', 68–69.

¹⁵ Lipsius, Admiranda, 117.

^{16 &#}x27;Cum boni regiminis nullum sit certius signum quam magnarum urbium copia et frequentia, non est ut vastas Sinensium miremur urbes, quarum si spectemus amplitudinem, tantum illas caeterarum gentium civitates magnitudine superasse inveniemus, quantum arte regnandi omnibus aliis meliores ipsi semper fuere mortalibus. Non iam loquor de praesenti Sinarum statu et conditione, postquam malorum principum et magistratuum culpa corrupta eorum Republica in praedam cessere Barbaris, omniaque apud ipsos facta fuere minora; sed de feliciori tempore, cum sui tantum generis regibus parerent, illis quidem non semper bonis, raro tamen tam malis, ut neglecta omni regiminis cura, solis servirent vitiis' (Vossius, Variarum observationum liber, 56).

Viennent ensuite Athènes, puis Londres et Paris. La taille qu'il propose pour ces deux villes est bien inférieure à celle qu'il donne pour la Rome antique:

Si les mesureurs ne se trompent pas ces deux cités jointes ensemble couvrent une aire qui fait presque une lieue germanique, soit 16 000 pieds carrés.¹⁷

Le nombre d'habitants à Paris et Londres n'excèderait pas 600 000. La population romaine antique aurait donc été bien plus importante – ce qui conduit Vossius à conclure sur la dépopulation du monde.

La très rapide présentation que nous avons faite de ce passage suffit à comprendre la démarche de Vossius. Dans la tradition humaniste, il mêle l'étude philologique et la méthode comparatiste. Cependant la distance qu'il prend avec la philologie traditionnelle, choisissant d'expliquer les variations du texte par l'infidélité des copistes plutôt que de confronter les différentes leçons, s'explique, me semble-t-il, par un nouveau rapport à l'antiquité. Il s'agit moins pour lui de réfléchir sur le passé que de chercher à comprendre le présent.

La réception du *Variarum observationum liber* montre que les contemporains ont bien perçu ces deux aspects. Les *Nouvelles de la République des lettres* rendirent compte de l'ouvrage dès sa sortie, dans leur livraison de janvier 1685.¹⁹ Le nouvel intérêt pour l'histoire démographique y apparaît clairement.²⁰ La partie la plus longue de l'article²¹ – une bonne douzaine de pages (87–95) – est consacrée à cette question. L'auteur y manifeste un certain étonnement sur les chiffres proposés par Vossius. 'Monsieur Vossius a sur cela des pensées qui paroîtroient incroyables à bien des gens'; 'Rome nous paroit déjà d'une grandeur excessive'. Quant au dénombrement de population, il n'apparaît 'pas moins extraordinaire' à l'auteur de l'article:

 $^{^{17}\,}$ 'Si mensores non fallunt duae istae civitates simul iunctae aream insident quae fere leucam conficiat Germanicam, sive sedecim millia passuum quadrata' (Vossius, *Variarum observationum liber*, 33).

¹⁸ Vossius, *Variarum observationum liber*, 34. Il revient, ibid., 65, sur la population de Londres et de Paris, en soulignant que la population londonienne augmente de jour en jour grâce au bon gouvernement royal.

¹⁹ Nouvelles République des lettres III, article XI, 87–101.

²⁰ Voir Ducreux, 'Les premiers essais'.

²¹ La partie sur la Chine n'a droit qu'à deux pages et demi, et les autres traités tous ensemble ne sont examinés que sur trois pages.

On ne sçauroit contester raisonnablement à Monsieur Vossius ce qu'il dit de l'étrange diminution d'habitans que plusieurs parties de la terre ont soufferte, & de la coûtume étourdie que l'on a par tout de faire le nombre des hommes bien plus grand qu'il n'est.

Mais l'auteur critique aussi le chiffre de 300 000 habitants pour Paris et celui de la Hollande, qu'il juge insuffisants.

Même après sa mort, l'analyse de Vossius alimenta les débats, et dans les deux domaines que nous avons soulignés. Il continua, d'abord, d'être lu par les éditeurs de Pline et par les historiens de l'antiquité. Ainsi, Edward Gibbon (1737–1794) l'utilise comme une source quand il écrit:

'In ea autem maiestate urbis, et civium infinita frequentia, innumerabiles habitationes opus fuit explicare. Ergo cum recipere non posset area plana tantam multitudinem in urbe, ad auxilium altitudinis aedificiorum res ipsa coegit devenire. Vitruv. ii.8.'²² This passage, which I owe to Vossius, is clear, strong, and comprehensive.²³

Pourtant Gibbon est loin d'approuver le dénombrement que Vossius fait de la population de la Rome antique et il lui préfère celui de David Hume sur lequel nous reviendrons plus bas :

Lipsius (Tom. iii. p. 423, *de Magnitud. Romana*, l. iii. c. 3) and Isaac Vossius... have indulged strange dreams, of four, or eight, or fourteen, millions in Rome. Mr. Hume, with admirable good sense and scepticism betrays some secret disposition to extenuate the populousness of ancient times.²⁴

En effet, ce n'est pas la taille de la Rome antique seulement et le nombre de ses habitants qui retinrent l'attention des lecteurs. Les calculs que Vossius avait entrepris dans la suite du traité pour évaluer la population des villes de l'Europe moderne, en particulier celle de Londres et de Paris, et pour la comparer à celle de la Rome antique, furent utilisés dans la longue polémique qui agita le XVIII^e siècle à propos de la dépopulation du monde. Vossius attribuait 300 000 habitants à Paris et à Londres. Il comptait, pour Paris, 25 000 maisons et 12 personnes par maison, pour Londres, 50 000 maisons et 6 personnes par maison. Avec ses 14 millions

²² 'Du fait de la grandeur de la cité et du nombre infini de citoyens, il eût été nécessaire d'augmenter le nombre d'habitations indéfiniment. Donc, comme la surface au sol ne peut pas contenir une si grande multitude dans une ville, la situation même contraignit à avoir recours à la hauteur des édifice' (Vitruve, 2.8.17, cité dans Vossius, *Variarum observationum liber*, 33).

²³ Gibbon, Decline and Fall III, chap. 31, 118, n. 68.

²⁴ Ibid., n. 66.

d'habitants, la Rome antique aurait donc été 20 fois plus peuplée que Paris et Londres prises ensemble.

Les *Observationes* de Vossius nourrirent donc dès leur parution les réflexions démographiques de ses contemporains. Sébastien Le Prestre de Vauban (1633–1707), à côté de ses occupations d'ingénieur militaire, s'intéressa de très près à la démographie française. Un ouvrage récent montre que l'amiral de Louis XIV a lu Vossius et qu'il l'utilise en particulier dans un traité resté manuscrit, anonyme, mais raturé de sa main – 'Oeconomie royalle ou moyen de réduire les revenus du Roy' – conservé aux Archives Nationales.²⁵ Vauban juge l'estimation de la population parisienne par Vossius insuffisante et dans le *Projet d'une dixme royale*, il critique explicitement le chiffre avancé par Vossius.²⁶

Le dénombrement de la population, s'il intéressait les économistes du XVIII° siècle et leur posait un problème de méthode, nourrissait aussi la réflexion des philosophes. L'idée d'un *mundus senescens*, d'un passé qui serait un âge d'or révolu, répandue au XVII° siècle, se manifeste encore dans le débat sur la dépopulation du monde qui perdura au XVIII° siècle. Les Observationes de Vossius contribuèrent à le nourrir. On trouve une des expressions de ce débat dans les *Lettres Persanes* de Montesquieu (1654–1713), qui a pu lire Vossius, ou du moins avoir eu connaissance de sa théorie de la dépopulation par *le Journal des Savants*. Montesquieu fonde très clairement cette idée de 'vieillesse' de la nature sur la dépopulation du monde qu'on constaterait en comparant la population de la Rome antique à celle de l'Europe moderne. Les Il fait écrire par Rhédi à Usbek:

 $^{^{25}\,}$ Voir Virol, Vauban, 131, 132, 416. Sur Vauban et la population, voir aussi Virol, 'Connaître et accroître les peuples du royaume'.

^{26 &#}x27;Voilà sans doute un grand sujet d'étonnement pour ceux qui croient la France si dépeuplée; et de quoi bien surprendre le célèbre Vossius s'il était encore en vie, d'avoir écrit qu'elle ne contenait que 5 millions d'âmes' (Daire, Économistes financiers, 118). Le Projet d'une dixme royale qui, supprimant la taille, les aydes, les doüanes d'une province à l'autre, les décimes du Clergé, les affaires extraordinaires et tous autres impôts onéreux et non volontaires et diminuant le prix du sel de moitié et plus, produiroit au Roy un revenu certain et suffisant, sans frais, et sans ête à charge à l'un de ses sujets plus qu'à l'autre, qui s'augmenteroit considérablement par la meilleure culture des terres, fut publié, s.l., en 1707. De la même façon, l'évaluation de la population londonienne que proposait Vossius était bien loin de celle de William Petty (1623–1687), le père de l'arithmétique politique, qui, s'appuyant sur une méthode plus fine, comptait environ 670 000 habitants à Londres. Voir, en particulier, Petty, Collection of the Yearly Bills of Mortality.

²⁷ Sur ces questions, voir Dupâquier, 'Londres ou Paris?'.

²⁸ Comme souvent, dans les *Lettres Persanes*, Montesquieu utilise le cadre fictionnel pour aborder des questions d'actualité et se sert de son personnage comme d'un porteparole. Il reviendra sur cette question dans *De l'Esprit des Lois*, au livre XXIII 'Des lois dans

Tu n'as peut-être pas fait attention à une chose qui cause tous les jours ma surprise. Comment le monde est-il si peu peuplé, en comparaison de ce qu'il était autrefois? Comment la nature a-t-elle pu perdre cette prodigieuse fécondité des premiers temps? Seroit-elle déja dans sa vieillesse? & tomberoit-elle de langueur?

Et Rhédi ajoute:

Il y a des gens qui prétendent que la seule ville de Rome contenoit autrefois plus de peuple, que le plus grand royaume de l'Europe n'en a aujourd'hui.²⁹

La position de David Hume (1711–1776) est bien différente. Dans un de ses *Political Discourses*, 'Of the populousness of ancient nations', publiés en 1752, le philosophe anglais attaque directement Isaac Vossius sur cette question de population: 'But is it certain, that antiquity was so much more populous, as is pretended? The extravagancies of Vossius, with regard to this subject, are well known'. ³⁰ Il argumente contre Vossius en se plaçant son propre terrain, celui de la philologie:

...we may perhaps allow Vossius (though there is no manner of reason for it) to read the famous passage of the elder Pliny his own way, without admitting the extravagant consequences which he draws from it...All the best manuscripts of Pliny read the passage as here cited, and fix the compass

³⁰ Hume, *Philosophical Works*, 424. Voir aussi Hume à John Clephane, 29 avril 1750 (*Letters of David Hume* I, no 1, 140). Sur la question de la population chez Montesquieu et Hume, voir Oak, 'Montesquieu and Hume'.

le rapport qu'elles ont avec le nombre des habitants', chap. XIX. 'De la dépopulation de l'univers'.

²⁹ Rhédi à Usbek, le 10 de la lune de Rhégeb, 1718 (Montesquieu, Lettres Persanes II, no. 1078, 89). Voir aussi l'article 'population' dans l'Encyclopédie de Diderot: 'On sait qu'un grand nombre de savans ont pensé que l'espece humaine avoit souffert de grandes réductions. On voit que c'étoit déja l'opinion de Diodore de Sicile, celle de Strabon, & de tous les historiens de l'antiquité, dont il seroit trop long de citer ici tous les passages, & qui d'ailleurs n'ont fait que se répéter. Vossius met une différence encore plus forte entre la quantité des hommes dans les tems anciens & dans les siecles modernes. Le calcul qu'il publia sur ce sujet en 1685 est insoutenable. Il réduit le nombre des habitans de l'Europe à 30 millions, dans lesquels il ne comprend ceux de la France que pour 5 millions; on sait que jusqu'à la révocation de l'édit de Nantes, on a toujours compté 20 millions d'habitans dans ce royaume; c'est à quoi les portent le dénombrement qui en fut fait à la fin du siecle dernier, & l'auteur de la dixme royale attribuée à M. le maréchal de Vauban.... Cela doit servir à prouver combien il faut se défier de ceux que nous ont laissés les autres historiens de l'antiquité. Ne devons-nous pas croire en effet que Diodore de Sicile & les autres ont été trompés par de faux calculs & des récits peu fideles ? Qui est-ce qui, dans l'avenir, ne croira pas pouvoir assurer, d'après les calculs de Vossius & la géographie d'Hubner, que l'Europe, au seizieme siecle, n'étoit peuplée que de trente millions d'habitans, appuyé sur-tout du témoignage du célebre Montesquieu?' (Diderot, Encyclopédie XIII, 90-91).

of the walls of Rome to be thirteen miles... The sense which Vossius in his *Observationes variae* puts on this passage of Pliny, errs widely in the other extreme. One manuscript of no authority, instead of thirteen miles, has assigned thirty miles for the compass of the walls of Rome. And Vossius understands this only of the curvilinear part of the circumference; supposing, that as the Tyber formed the diameter, there were no walls built on that side. But this reading is allowed to be contrary to almost all the manuscripts... The very extravagance of the consequences drawn by this critic, as well as Lipsius, if they be necessary, destroys the foundation on which they are grounded; That Rome contained fourteen millions of inhabitants; while the whole kingdom of France contains only five, according to his computation, &c.³¹

Et au XIX° siècle, l'écrivain Thomas Babington Macaulay (1800–1859), qui était d'ailleurs aussi un parlementaire whig, dans *The History of England from the Accession of James the Second*, s'appuiera encore sur Vossius pour critiquer cette fois le nombre excessif d'habitants prêtés à la ville de Londres:

Even intelligent Londoners ordinarily talked of London as containing several millions of souls. It was confidently asserted by many that, during the thirty-five years which had elapsed between the accession of Charles the First and the Restoration the population of the City had increased by two millions. Even while the ravages of the plague and fire were recent, it was the fashion to say that the capital still had a million and a half of inhabitants. Some persons, disgusted by these exaggerations, ran violently into the opposite extreme. Thus Isaac Vossius, a man of undoubted parts and learning, strenuously maintained that there were only two millions of human beings in England, Scotland, and Ireland taken together.

Cette réception montre combien il est malaisé de situer Isaac Vossius dans l'histoire de la pensée. Sa démarche est encore celle d'un philologue, mais elle est loin de celle de la philologie humaniste et son rapport au texte est plus proche de celui des philosophes des Lumières. Ainsi, dans ce volume tardif, Isaac Vossius prend une réelle distance avec les méthodes humanistes; pas de précision sur les éditions, sur les manuscrits qu'il utilise; pas de notations issues de son voyage à Rome. De plus, Rome, dans le 'De magnitudine', n'est plus son unique centre d'intérêt. C'est un élément parmi d'autres qui lui permet d'ouvrir sa réflexion sur la dépopulation

³¹ Hume, *Philosophical Works*, 484–486.

³² Une note renvoie aux *Observations on the Bills of Mortality* du Captain John Graunt, en fait Sir William Petty, chap. XI. Voir supra, n. 27.

³³ Macaulay, History of England I, chap. III, 'State of England in 1685', 293.

de l'univers et ses causes politiques; la démographie est liée à un régime politique – ce qui en soi n'est pas une erreur, même si les chiffres sur lesquels Vossius se fonde sont des plus fantaisistes. Plus qu'un 'humaniste', Vossius est un 'curieux'; l'étendue de ses intérêts semble illimitée. Outre la démographie, il s'interroge avec la même ardeur sur la langue parlée par le Christ, sur la circulation du sang ou la fabrication de la poudre à canon. Mais si cette polymathie le rapproche des humanistes, une certaine liberté dans le traitement des sources évoque déjà les penseurs des Lumières.

MANUSCRIPT NOTES IN BOOKS FROM THE VOSSIUS COLLECTION

Susan Derksen*

To do justice to the truth, and to shut the mouths of the godless, let us add to the commonly assumed age of the world 1440 years, so that in all no more difficulties will remain. In this way, the current year is the 7048th.¹

With these words, Isaac Vossius ended his *Dissertatio de vera aetate mundi*. In this pamphlet-sized text, he would give new impetus to an issue hotly debated in the seventeenth century: the exact age of the world. As Anthony Grafton explains in this volume, it was far from easy to draw a clear conclusion from the massive amount of different calculations. This complexity for example is evident from the rapid exchange of arguments between Vossius and Georg Hornius (1620–1670) in 1659.

In his *De vera aetate mundi*, Vossius draws on various sources; a prominent example is Flavius Josephus, who is invoked to prove that the Septuagint is a more reliable version of the Bible than the Hebrew text. Furthermore, Vossius praises Louis Cappel (1585–1658) for pointing out the differences between the various versions of the Holy Scripture in his *Critica Sacra*.² He occasionally refers to ancient authors such as Aristotle, Eusebius and Diodorus Siculus, and to important explorers such as Marco Polo and Odoric of Pordenone. Additionally, Vossius criticises Joseph Scaliger (1540–1609), the greatest chronologer of his time, for having made several mistakes in his calculations.³ From the quantity of references, and the confidence with which Vossius presents his arguments, it is clear that he has studied the works of these authors in depth. A brief search through

^{*} This paper highlights several main points of my MA-thesis, and I am much indebted to my supervisors: to Eric Jorink for inspiring me with his enthusiasm about Isaac Vossius, and for encouraging me to rewrite my thesis for this volume; and to Paul Hoftijzer for the many helpful comments during the research process. I would also like to thank Anthony Ossa-Richardson for correcting the translations and my English, and for his useful remarks.

¹ Vossius, *De vera aetate mundi*, LV. 'Ut itaque veritati satisfiat, ac impiis os obtundatur, addantur ad receptam mundi aetatem anni 1440. jam nulla supererit difficultas. Praesens itaque aerae mundanae annus is est 7048.'

² Ibid., VII.

³ Ibid., XL.

the catalogue of the Vossius collection shows that Vossius' magnificent library included copies of almost every source.⁴

It is fortunate that the collection, as it was acquired by Leiden University in 1690, remains available today, and retrievable within the university library, as this offers a wonderful opportunity for a book-historical research project. Taking the sources of Vossius' *Dissertatio de vera aetate mundi*, as a starting point, it would be interesting to see what information could be derived from the material aspects of books in the Vossius collection. Although it is in many cases impossible to find out when Vossius acquired a book, let alone when he read it, he left his marks in many of them. The margins of some of his books provide a fairly good insight into what he thought about a text, or what information he wanted to add to it.

Vossius was not the first owner of all his books; some he bought or received from other collections, and sometimes their bindings, title pages and endpapers still bear the marks of their previous owners. In several cases, it is possible to identify an ownership sequence, and thus reconstruct the 'life story' of a single book, and the personal network of its previous owner. Marginalia by past owners, especially the emendations of an important scholar, or collations from a rare manuscript, would add extra value to a book and may have been the main reason for Vossius or other collectors to acquire the book, sometimes even if they already owned a copy of the same edition.

A recent trend in research into the history of books, for example described by David Pearson, is the examination of multiple copies of the same edition of a book.⁵ This is not done primarily to identify variations in printing and collation – although this is usually part of the research as well – but to compare their bindings, annotations, and other traces of use by their former owners. Another brilliant example of this type of research is provided by Owen Gingerich, who managed to describe 601 copies of the first and second edition of Copernicus' *De revolutionibus*.⁶ Both Pearson and Gingerich searched for copies in many libraries and countries, and their research results include many treasures from all over the world, providing unique insights into the minds of the scholars who read these books in the sixteenth and seventeenth centuries. However, even small-

 $^{^4}$ This catalogue, with LUB shelfmark BPL 127 AF, covers the collection as it was acquired by Leiden University in 1690.

⁵ In his paper, Pearson describes his own research project on 65 copies of three editions of the translated *Commentaries* of Julius Caesar; Pearson, 'What Can We Learn by Tracking Multiple Copies of Books?', 17–37.

⁶ Gingerich, An Annotated Census of Copernicus' De Revolutionibus.

scale research on one particular location – in this case the Vossius collection in the Leiden University Library – could lead to interesting results, two examples of which are given in this chapter.

To identify the hands of Isaac Vossius and others, the marginalia of a corpus of 75 books, selected from the Vossius Collection, were compared to the notes in the margins of books that are indicated either in the catalogues or in scholarly literature as being annotated by him or someone else. Obviously, the evidence was not always sufficient to state with certainty that annotations were made by a particular person. Some scholars can be recognised by their distinctive handwriting, yet many others wrote in an inconsistent or more unremarkable hand, and Isaac Vossius belonged to this second group. Fortunately, there are annotations which are unquestionably by Vossius – for instance, those referring to his own work – and these may be used to identify annotations of less certain attribution (figs. 1–2).

nem esse Jeónvo sor divinitus inspiratom. ut nunc audinus.

La non ride Cujus opinionis nulla possum animadvertere argumenta. Nam,

the divis full guid inter ipsos Christianos primis temporibus Hellenistarum

(italem: vidua negligivisa sunt, Actor. 6:1. id non videtur indicare,

quòd Hellenista pari in existimatione suerint cum Hebrais,

Gracus Codex, quo illi utebantur, pari in honore cum

Hebrao. Neque videtur Apostolus sine causa inter gloriatio-

Fig. 1. Vossius' handwriting in the preface of the *Iudaicarum responsionum* et quaestionum consideratio by Johannes Coccejus (1603–1669) (LUB, shelfmark 510 C 16).⁷

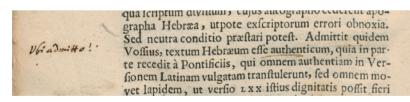


Fig. 2. Vossius' reaction ('Ubi admitto?'/'Where do I admit this?') to an allegation on page 6 of the *Authentia absoluta s. textus hebraei vindicata* by Antonius Hulsius (1615–1685) (LUB, shelfmark 499 F 3).

 $^{^7}$ This example has been examined by Lebram, 'Ein Streit um die Hebräische Bibel und die Septuaginta', 51–53. It is also mentioned by Scott Mandelbrote in this volume, above, 94, n. 42.

Books as Sources

As will become clear from the examples given below, the 75 analysed books offer various kinds of information with regard to bindings, previous owners, and annotations. Like all scholars of his time, Isaac Vossius used his books actively. He compared various versions, collated printed books with manuscripts, used them as sources for his own works, and exchanged them with friends and colleagues. Vossius used the endpapers of some books as scrap paper for calculations; other books were preserved as treasures. Some books look like they were never touched, while the content of others appear to have angered their former owners, judging from the many arrows and critical annotations in the margins and the crossed-out sentences in the text.

One aspect of his books that Vossius seemed to care little about was their bindings. It is impossible to draw this conclusion for the entire collection, because many books were rebound after their acquisition by Leiden University Library. Yet the books that did not receive new bindings after Vossius died are, in general, poorly preserved. Usually, Vossius appears to have preferred plain white limp vellum bindings for his new acquisitions, as was the custom in the Netherlands. Sometimes these books and their bindings are still intact and look perfectly fresh, but in most cases they were damaged by sunlight, fluids such as water and ink, woodworm, rodents, and - in the case of a 1624 Greek-Latin New Testament – even by a glowing ember.⁸ It should be noted here that the damages may also have been caused when the books were already part of the University Library collection. Books from the Vossius collection which had one or more (wealthy) previous owners are more likely to have been bound in decorated leather or vellum, but many of these show traces of extensive use as well.

It is not very surprising that the Vossius collection is rich in important works, but not, as far as can be concluded from this research, in pretty bindings. After all, Isaac Vossius was neither a nobleman nor a true bibliophile, that is someone who collects books mainly for their external appearance, or whose bookcase serves chiefly to impress visitors. Vossius was not poor either, but as a scholar he appreciated books mainly for their content, and it looks like he collected books because he wanted to have a large amount of correct and useful information at his immediate disposal.

⁸ LUB, shelfmark 754 D 1.

Acquiring the best editions and rarest manuscripts must have cost him a fortune. However, Vossius also had a commercial interest in his books, and was quite aware of their value.

With regard to Vossius' pragmatic attitude towards books, it is interesting to note that Vossius seems to have had similar ideas about his own publications. Apart from simple ornaments on the title pages, and decorated initials in some of his publications, images in his works only served practical, explanatory purposes. It could be a coincidence, but even the illustrations in his *De lucis natura et proprietate* (1662), which looks similar to Descartes' *Essais* in many aspects, are very straightforward and plain. The images used for the *Essais*, on the other hand, are more detailed and include decorative elements.

Taking into account that the Vossius collection contains a large amount of exquisite manuscripts and printed books, it can be considered a fortunate fact that Vossius did not have to pay for every book he owned. He inherited a beautiful collection from his father, received books as gifts from many friends and colleagues, and managed to add to his collection numerous books and manuscripts from that of Queen Christina of Sweden. In some cases, previous owners of the books can be traced because they wrote their names on the endpapers or on the title page, and sometimes they can be identified by their characteristic handwriting in the marginalia and other annotations. In other cases, only part of the identity can be recognised. Isaac Vossius himself rarely wrote his name in his books – among the examined titles only three contain his name.¹⁰

Three previous owners of books analysed for this research could be identified by means of a dedication, which then revealed the names of the donors as well. In two cases, these former owners were the authors themselves, who may have donated author's copies of their newly published work to their friends. Scaliger gave a copy of his *Thesaurus temporum* (1606) to his close friend Carolus Clusius (1526–1609), and wrote a dedication on the title page, while Louis Cappel gave a copy of his *Ad novam Davidis lyram* (Saumur 1643) to Claude Sarrau (ca. 1600–1651); the date of the explanation on the title page (1642) shows that he did this before

⁹ I owe the observation on the pragmatic style of Vossius' publications to Eric Jorink, who also notes the similarities between Vossius *De lucis natura*, and the *Essais* following Descartes' *Discours de la méthode* (1637) in his contribution, above, 126–130.

¹⁰ The contributions of Astrid Balsem and Dirk van Miert (41–42) to this volume provide several examples of books that previously belonged to other scholars.

¹¹ LUB, shelfmark 754 A 13. 'C.V. Carolo Clusio suo Joseph Scaliger D.D.'.

¹² LUB, shelfmark 503 G 16.

the book was officially published. The third donor was Theodore Craanen (1621–1689), a professor of medicine in Leiden who gave Vossius an edition of the Septuagint, according to the dedication on the first endpaper.¹³

Of the 75 analysed books, thirteen contain collations with manuscripts and/or earlier printed versions. As a philologist, Vossius saw the importance of comparison as a way to get as close to the 'original text' as possible, whether he planned to create a new edition of a work or not, and he attached great importance to ancient manuscripts. The manuscripts used for these collations were sometimes part of his own collection or of his father's, but could also have been consulted in a foreign library or borrowed from someone else.

Quotations and references to other books are another type of annotations to be found, in 26 books. The most extreme example is the interleaved copy of Aristotle that was annotated by Franciscus Nansius (1513–1595), a well-known classicist, who had Gerardus Joannes Vossius among his pupils in Dordrecht. Nansius had written his notes from lectures by Adrianus Turnebus (1512–1565) on almost every inch of blank space available, and may also have put in references and remarks of his own. Other writers of references to other works include his uncle Franciscus Junius the Younger (1591–1677), and Sir Thomas Browne (1604–1673), a friend of Isaac Vossius who had been Canon of Windsor before him. Vossius also wrote references in books from his own collection: in books about chronology and Bible translations he sometimes refers to Flavius Josephus; and in his reproachful remarks to Antonius Hulsius, for example, Vossius refers to the Italian theologian Nobilis Flaminius and to Jerome.

A third type of reference consists of emendations: corrections in a word or sentence, which can sometimes be difficult to discern from collations; and text-critical remarks: more elaborate annotations that were made to refute or correct a word, sentence, or paragraph in the text. Some books contain remarks of this type in Vossius' own handwriting, but there is also

¹³ LUB, shelfmark 576 B 5: 'Donum collegae coniunctissimi Theodori Cranen, medicinae & philosophiae doctoris, & professoris matheseos et medicinae'. Craanen was professor of medicine and mathematics in Nijmegen, and would in 1670 become professor of philosophy and mathematics in Leiden. When it became apparent that he was a radical Cartesian and caused too much trouble, the curators decided to appoint him professor of medicine instead. See Van Ruler, 'Craanen'.

¹⁴ Van der Aa, 'Franciscus Nansius of Nans', 66.

¹⁵ LUB, shelfmark 757 D 32:1; cf. Letrouit, 'La prise de notes de cours', 49-53.

the copy of a work by James Ussher in which G.J. Vossius wrote his remarks. ¹⁶ The books that were presumably annotated by Franciscus Junius the Elder (1545–1602) also contain numerous text-critical comments. Isaac Vossius also corrected his own texts: his copy of *De Septuaginta interpretibus* contains several crossed-out words and sentences, corrections of typesetting mistakes, and additions to sentences. ¹⁷ Vossius may have made these corrections with a new edition in mind, as they almost look like corrections of page proofs.

Six books contain annotations that do not seem to correspond to the content, and were possibly pen trials or quick memos. There are also several small drawings in the margins and calculations on endpapers, a repetition of the prayer of blessing in six languages in an edition of Aristotle, ¹⁸ and enigmatic messages on the endpapers of a Greek-Latin bible. ¹⁹ However, other than these, there are no more 'meaningless' annotations to be found within the selection.

Vossius owned a large number Bibles. In fact, the catalogue shows no fewer than twenty manuscripts and manuscript fragments, and eighteen printed books. For this paper, only six printed versions of the Old Testament and one of the New Testament were analysed, two of which are editions of the Septuagint. One of the Septuagint editions was likely to have been useful through its annotations by Franciscus Junius the Elder. The fact that these manuscript collations were later used for the 1725 Amsterdam edition by David Millius (1692–1756), professor of theology and oriental languages in Utrecht – who does not mention in his introduction that the collations may have been written by Junius – shows that this book was an important source for further research.²⁰ Therefore, it is not surprising that Vossius kept this copy in his collection. However, as mentioned before, the other Septuagint edition only seems to be in the

 $^{^{16}\,}$ J. Ussher, Gotteschalci, et praedestinatianae controversiae ab eo motae, historia (Dublin 1631); LUB shelfmark 507 F 17.

¹⁷ LUB, shelfmark 499 C 7.

¹⁸ Geneva 1597; LUB, shelfmark 679 D 17.

¹⁹ Basel 1550; LUB, shelfmark 754 C 20.

 $^{^{20}}$ From a note by an unknown later researcher on the first endpaper of the 1587 Septuagint edition (LUB, shelfmark 755 A 1), it becomes clear that Millius used manuscripts from the library of Leiden University for this new Septuagint edition. To get a clear overview of the available sources, Millius consulted the printed editions (and their annotations) from the library collection as well, as can be concluded from fol. 4 $^{\circ}$ of his *Vetus Testamentum ex versione Septuaginta interpretum*. See also Darlow and Moule, eds, *Historical Catalogue*, 624, where the list of variant readings 'by Isaac Vossius' in the Rome 1587 edition is emphasised as well.

collection because Vossius received it from Theodore Craanen, if Vossius was the 'collega coniunctissimus' mentioned in the dedication.

Two Greek-Latin Bible editions, one annotated by Paul Colomiès (1638–1692) and the other by Meric Casaubon (1596–1671),²¹ may have been of interest to Vossius for their manuscript collations. It looks like Vossius only acquired both Bibles well after he wrote his *De vera aetate mundi* and *De Septuaginta interpretibus*, as the one annotated by Colomiès contains references to the latter, and the one annotated by Casaubon has 'Isaaco Vos[s] io 1684' on the last endpaper, although it is unclear who wrote this.

Marginal Notes

The annotations that are most clearly related to the discussion of the age of the world and the authority of the Septuagint can be found in the margins of the works of other authors, which contained reactions to *De vera aetate mundi*, and later works. Apparently, while reading these reactions, Vossius already thought about how to respond to them, subsequently writing his initial remarks in the margins. These notes would enable him to remember which points angered him the most, which counterarguments he could use, and which sources would be most suitable to support his own claims. While writing in the margins, Vossius often used complete sentences, which were sometimes quite elaborate, as if he expected others to read these notes as well.

With regard to chronology, Vossius shows a meticulous approach to calculations – that is, if the corrections in chronological tables and chapters are assumed to be his. Corrections or variant readings in tables and in dates can for example be found in Martini's *Sinica historia*,²² which contains corrections to the numbers of years before Christ in which certain emperors started their reign. It is unclear where these corrections come from, but it looks as if the author made several mistakes in converting the Chinese calculation of sixty-year cycles into the Christian chronological order of years before and after the birth of Christ, and the annotator(s) wanted to correct these mistakes.

 $^{^{21}}$ Paul Colomiès added references and collations to a copy from Basel 1582 (LUB, shelfmark 754 C 16–19). A copy from Basel 1550 (LUB, shelfmark 754 C 20) contains collations and comments by Meric Casaubon.

²² Munich 1658; LUB, shelfmark 383 F 14.

victorià supra Philistæos reportatà, quæ non videtur lesephus 18 annos diu præcessisse postulationem populi de Rege habenfut samuel 3, zz vendo, quæ refertur cap. 8, 5. ita ut videri non injurià
annos solum respnasse possit possit samuel solus totos viginti annos illos rexiste
supolimus Saudine Israëlem post Heli mortem, totidem verò Saüli attrigra tribuit annus zt. buendos esse, quorum magnam partem cum Samuele egit. Sic ergo 40 isti anni simul Samueli & Saüli

Fig. 3. Vossius' handwriting on page 152 of Cappel's *Chronologia sacra* (LUB, shelfmark 506 D 8:1).

Interesting examples of corrected dates and years can be found in Cappel's *Chronologia sacra*.²³ As these annotations contain more text than those in the *Sinica historia*, which were predominantly numerical, it can be said with more certainty that Isaac Vossius wrote them (fig. 3).

He may not have used his corrections for the text and chronological tables of De vera aetate mundi, but it is very likely that he did read Cappel's text closely with a more elaborate work such as De Septuaginta interpretibus in mind. The fact that he refers to Flavius Josephus, the Arundel Marbles, and possibly also to the Codex Alexandrinus, provides some evidence for this theory. Other corrections or variant readings in dates and years can be traced back to Scaliger's *Thesaurus temporum*, Diodorus Siculus' Bibliotheca historica, Flavius Josephus' Antiquitates Judaicae and even to Vossius' own works. His copy of De vera aetate mundi contains references to Flavius Josephus, and variant readings from this source. Vossius probably places these variant readings next to his own calculations to compare them, but he did not change anything in his own calculations for the version of De vera aetate mundi which was incorporated into De Septuaginta interpretibus. It is also interesting to see that Vossius places many corrections in the margins of his friend Cappel's Chronologia Sacra, and relatively few in the Thesaurus temporum, Elenchus, and De emendatione temporum of Joseph Scaliger, whom he criticises more than once in De vera aetate mundi.

Any expectations of annotation styles would be mere guesswork, as each reader chooses his own way to use the margins of his books – if he chooses to use them at all. For a seventeenth-century scholar, gathering variant readings from manuscript in one or more working copies was the only way to create a comprehensive overview, and hopefully a new edition. This kind of annotation is of immediate practical use for colleagues

²³ Paris 1655; LUB, shelfmark 506 D 8:1.

and other interested readers, as variant readings, references and emendations were – and probably still are – perceived as an enrichment of the book. They would save the reader some cross-reference searching and offered a new outlook on what the archetype may have looked like.

Although the reader has to stick to certain rules while writing these scholarly annotations – e.g. the notes have to be legible and as exhaustive as possible – he could determine for himself where to put indexing terms, which paragraphs to underline, how to formulate a personal remark or memo, if he wanted to place an owner's mark on the title page or test his pen on one of the endpapers. Until the mid-seventeenth century, the margins and endpapers of printed texts were the most common writing space for notes of any kind, as paper was relatively expensive. During the seventeenth century, the use of separate notebooks became more common.²⁴ Yet, the best place to write down collations, references, and emendations, remained in the book itself – if it offered enough space to do so. There are no strict rules for annotations, although certain 'trends' would probably develop, especially in a scholarly culture where books circulated through large networks of colleagues, family and friends.

Models of how to make annotations could be provided within these networks, e.g. by a father to his son, or by a teacher to his pupil, but annotation styles could also be learned from the works of prominent authors. The advice of Erasmus on good indexing was followed by many scholars, even in later centuries.²⁵ They underlined words, put manicules, arrows, or other signs in the margins, and sometimes listed the marked terms on one of the endpapers. Annotations from the sixteenth and seventeenth centuries show differences (manicules gradually turned into arrows, and Erasmus' advice on indexing was no longer followed as carefully) but the urge to add notes to books was obviously still present in Vossius' time.

Annotations in Flavius Josephus

Manuscript collations, variant readings and conjectures, either his own or those of others, were of much value to Vossius, and may still be of interest to today's scholars who are working on the same subjects. These annotations, and sometimes the diligence with which they were copied into other books, show how scholars of the sixteenth and seventeenth

²⁴ Sherman, Used Books, 7.

²⁵ Ibid., 29, citing Erasmus from Moss, *Printed Commonplace-Books*, 98.

centuries dealt with their sources. Where readers' comments may provide an insight into Vossius' opinion on certain topics,²⁶ the annotations of a more scholarly nature give us the impression of Vossius' approach in creating a new edition of a work.

One of the best examples to be found in Isaac Vossius' library as we know it today, is the number of editions and versions of Flavius Josephus. Approximately sixteen catalogue entries – ten printed books and six manuscripts or manuscript fragments – form a research library in their own right. Seven of the printed books can still be found in the collection, and three of them are of the 1544 Basel edition, printed by Froben. Leiden University Library owns eight copies in total of this *editio princeps*, created by the Dutch humanist Arnoldus Arlenius (ca. 1510–1582). Three of these copies contain annotations which are almost identical to the manuscript collations made by Emery Bigot (1626–1689).²⁷ Although Bigot's collations were of great help to many scholars, his work on Josephus seems to have been done mainly at the request of Vossius, who would later forward the notes to other scholars working on new Josephus editions.²⁸

In 1661, Bigot sent a letter to Vossius to remind him of the copy of the *Antiquitates Judaicae* which he had collated with a manuscript from the Royal Library in Paris²⁹ and sent to Vossius already in 1659, the year in which his *De vera aetate mundi* was published. 'If you have communicated it to Mr. Coccejus, and if you have copied the variant readings into your own exemplar, then please return it to me', he wrote.³⁰ It is unclear

 $^{^{26}}$ Readers' comments such as could be found in the $\it Praeadamitae$ discussed below, and in the works of Hulsius, Coccejus, and Schotanus discussed by Scott Mandelbrote in this volume.

 $^{^{27}}$ One is from the Vossius Collection (LUB, shelfmark 757 A 2), and most likely to be the original, or the first copy after the original notes by Bigot. Another copy, with LUB, shelfmark 757 A 5, was derived from the collection of Petrus Burmannus Secundus (1713–1778), with on the title page the remark: 'Ad marginem huius codicis nitida manu adscriptae sunt perpetuae collationes Emerici Bigotii cum codd. mss. ad X libros priores et caput I libri XI Antiquit. Judaicarum.' The annotations in this book can also be found in the margins of the Basel 1544 copy from the collection of Jacobus Perizonius (1651–1715), LUB, shelfmark 757 A 6. Perizonius almost certainly copied these annotations from the same edition in the Vossius collection, as the collations are written on exactly the same position on the page, and in exactly the same phrasing (sometimes abbreviated). They continue until page 320, after which the pages are left blank.

²⁸ Doucette, *Emery Bigot*, 144–145.

 $^{^{29}}$ Probably the Codex Regius Parisinus gr. 1421, containing chapters 1 to 10 of the *Antiquities of the Jews*.

³⁰ Letter from Bigot to Vossius, Paris, 17 November 1661: 'Si vous l'avés communiqué a Mr. Cocceius, et que vous ayés fait transcrire ces diverses lecons sur vostre Exemplaire, je vous prie de me le renvoier' (LUB, Ms. Bur. F 11-II, fols 367^r–369^r). See also Doucette, *Emery Bigot*, 151.

if Bigot ever received his book back. If he did not, this would probably not have been due to carelessness on the part of Johannes Coccejus: a copy of the collected works of Josephus, which is now in Leiden University Library and originally belonged to the collection of Jacobus Gronovius (1645–1716),³¹ contains the (crossed-out) owner's mark of Coccejus' son Johannes Hendrik (1649–1681). The manuscript collations in the margins are almost identical to those in the Vossius copy, albeit less elaborate and in several places supplied with additional comments. Although it cannot be stated with certainty that this copy once belonged to Johannes Coccejus Sr himself, the identical annotations, which do not extend beyond the first ten books of the *Antiquitates Judaicae*, provide strong evidence in favour of this statement.

The three copies of the Basel 1544 edition that certainly belonged to Isaac Vossius' collection, offered him a useful presentation of data, not only because these were three copies of the same edition, but also because each copy contained different annotations. One of the books³² contains collations that were possibly made by Franciscus Junius the Elder, Vossius' maternal grandfather, whose regular handwriting is almost as recognisable as that of his son, Franciscus Junius F.F.³³ Junius Sr was a well-respected minister and scholar, who had worked as a theologian at the University of Heidelberg and was famous as a preacher of tolerance towards deviant Christian ideas. Junius was later appointed as Professor of Hebrew in Leiden.³⁴ The annotations in the copy of the Basel edition of Flavius Josephus, which were believed to be of Junius' hand, included not only the aforementioned manuscript collations, but also a number of text-critical comments such as a comparison with the Latin translation by Rufinus (who had left out pieces of information from the text while translating). The annotator also compared the ages of the first humans (from Adam to Noah) from the Hebrew text with the Septuagint, to show that the latter was corrupted. He did this in the bottom margin of page 7, perpendicular to the printed text.35

³¹ Flavius Josephus, *Opera quae extant* (Geneva 1634), LUB, shelfmark 756 B 21.

³² LUB, shelfmark 757 A 1.

³³ Having identified Junius' hand in a previously listed book, the cataloguer wrote about this next book that it contained 'variis lectionibus et emendationibus eiusdem, puto, manu' (LUB, shelfmark BPL 127 AF, fol. 198', no. 14).

³⁴ For a full biography, see Benrath, *Franciscus Junius*.

³⁵ 'Haec recensio genealogiae apud omneis est corruptissima. Tu sic habe. Lxx aetati singulorum centuriam annorum Mahalaleeli etiam duas centurias addiderunt ut antiquitatem amplius mentirentur, illius temporis quo singuli genuerunt. Genuit ergo secundum recensionem Mosis' [here follows a list of patriarchs and their life spans; Hebrew text compared with LXX] 'sic partes respondent universae summae: nec dubito quin haec lectio germana sit, eamque servari oporteat.'

The author of the 1690 catalogue of Vossius' library was again not entirely certain when he wrote the entry for Vossius' copy of the 1524 Cologne edition of Josephus;³⁶ listing this work before the previously mentioned Basel copy, he described it as 'Multa ad marginem sunt annotata manu, ut puto, Francisci Junii, et emendata'.³⁷ As this edition is in Latin (and so are the remarks and collations in the margins), it is easier to compare the notes to letters that were written by Franciscus Junius the Elder at the end of the sixteenth century. This comparison immediately shows why the cataloguer believed that the annotations were written by Junius. The straight, carefully shaped letters, with elegant curls and accents, look similar to Junius' handwriting and are immediately recognisable when they appear in the margins of a book. Junius – if he was indeed the annotator – may have collated this work with a Rufinus manuscript, a translation of the Greek Josephus text, which he owned or borrowed. He may also have added some emendations of his own.

Another copy of the Basel 1544 edition either seems to prove that Vossius did copy Bigot's annotations into his own copy of the book, or it contains the original notes by Bigot.³⁸ As the collations are in Greek and there is not much Latin, we cannot be sure who wrote these annotations, but it is now clear that Vossius possessed Bigot's collations. An interesting detail of this copy is that the last part is missing, in such a way that the remaining volume contains exactly the ten books of which Bigot sent collations to Vossius.

The last copy of the 1544 Basel edition³⁹ in the Vossius collection also contains several annotations, such as references to the Bible throughout the entire book, in one hand, and a few variant readings in different hands, although their exact source is unknown. Another folio volume, printed by Petrus Aubertus in Geneva in 1634, contains only a small number of annotations, consisting of small corrections or variant readings, and – as it seems – one reference to Vossius' own *De Septuaginta interpretibus*.

In addition to the large folio volumes of Josephus in the Vossius collection, there were also two other editions, one in octavo and one in decimosexto. The octavo edition was printed by Sebastian Gryphius in Lyon in 1528.⁴⁰ This looks as if it has not been rebound by the University Library,

³⁶ LUB, shelfmark 757 A 7:1.

³⁷ LUB, Ms. BPL 127 AF, fol. 198^r, no. 13.

³⁸ LUB, shelfmark 757 A 2.

³⁹ LUB, shelfmark 757 A 3.

⁴⁰ LUB, shelfmark 678 F 6.

since it is bound in worn brown leather, and decorated with blind-tooled borders. In contrast to the worn leather stand the gilt edges, which were gauffered in a floral pattern. The first free endpaper contains a handwritten biography of Josephus, written by a former owner of the book. There are also two owner's marks, but both were crossed out by later owners. The first owner's mark on the title-page may be deciphered with some difficulty as 'Conventus Parisiensis Capucinorum'. The second is illegible. The last page contains a Latin sentence, probably a motto, but this has been partly scraped off and is now illegible as well.

The decimo-sexto edition consists of three volumes and was printed by Sebastian Gryphius as well, in 1555.⁴¹ Each volume contains the letters 'F V' and a quote from Augustine on the first free endpaper (in the first volume, there is also a quote from Pliny), written in a sixteenth-century hand, and an owner's mark on the title page, which has been scraped off and is therefore illegible. It looks as if two or three people have written in the margins of each volume of this book, mostly in a brownish ink, and in a rare case also in red, but it is unclear who these annotators were. The annotator(s) apparently compared this Latin edition to a Greek one, or to a more recent Latin version, and corrected several time durations in the first volume. In two cases, a Greek alternative word is given. Among the underlined words and sentences are many names, but also several time spans during which certain kings and other rulers reigned.

Besides the printed works with their elaborate annotations, Vossius also owned several manuscripts of the works of Josephus: four in Greek – of which one is an excerpt copy of one of the other manuscripts – and two in Latin. 42 Of these six Josephus manuscripts, Vossius acquired one from the English scholar Patricius Junius (or Patrick Young, 1584–1652). 43 The second manuscript originally belonged to Wilhelm Nooms (ca. 1605–1637), Lord of Aarlanderveen, who had been a friend of Vossius' brother Dionysius and had lived with the Vossius family in Amsterdam for a while. 44 Interestingly, the four other manuscripts originally belonged to Queen Christina

⁴¹ LUB, shelfmark 552 G 22-24.

 $^{^{42}\,}$ The Greek manuscripts in LUB have shelfmarks VGF 26, Misc. 7, F 72, and VGQ 13. The Latin manuscripts have shelfmarks VLF 17 and VLF 99.

⁴³ LUB, Ms. VGM 7. This excerpt is part of a collection of excerpts, most of which were written by Patrick Young. The Josephus excerpt is not in his hand, but it is a copy of VGF 26. See also De Meyïer, *Codices Vossiani Graeci*, 240.

 $^{^{44}\,}$ LUB, Ms. VGF 26. See also De Meyïer, Codices Vossiani Graeci, 29, and Rademaker, Vossius, 158.

of Sweden (two in Greek and two in Latin).⁴⁵ Christina acquired three of these from the collection of Paul (1568–1614) and Alexander (d. 1672) Petau, and bought the fourth from her physician Pierre Bourdelot, all with the help of Isaac Vossius.⁴⁶ The fact that Vossius almost certainly brought these four manuscripts along with him when he left Sweden in 1654, may mean that his fascination with Flavius Josephus already had started some years before he wrote his *De vera aetate mundi*.

Vossius' Copy of the Praeadamitae

Beside the analysis of scholarly annotations such as manuscript collations, variant readings and conjectures, it is also highly interesting – and sometimes amusing – for the modern reader to decipher Vossius' critical marginal comments. The analysed sample included several books containing annotations of this kind. Among these were works by Antonius Hulsius, Johannes Coccejus, and Christianus Schotanus, mentioned by Scott Mandelbrote in this volume (above, 94, n. 42), and there may be other examples to be found within the collection.

Vossius' *De vera aetate mundi* was partly a reaction to the theories that were popularised by Isaac La Peyrère (1596–1676). In his *Praeadamitae*, published anonymously in 1655 – in no fewer than five editions⁴⁷ – La Peyrère argued that Moses could never have been the author of the Pentateuch, because he must have been dead for quite a while by the time it was written. He also argued that the books were copied so often that the original text could no longer be retrieved.⁴⁸ After these arguments, he questioned the 'historical priority' of the Hebrew people and the belief

⁴⁵ LUB, Mss VGQ 13 and VGF 72, and the two Latin manuscripts mentioned in the previous note. See also De Meyïer, *Codices Vossiani Graeci*, 84, and idem, *Codices Vossiani Latini I*, 37 and 219.

⁴⁶ Vossius had bought over 2000 manuscripts from the Petau collection for Christina; see Blok, *Vossius and his Circle*, 354. On his mediation in selling the Bourdelot manuscripts to Queen Christina, see De Meyïer, 'Notes sur quelques manuscrits de Pierre Bourdelot conservés a Leyde', 257.

⁴⁷ Doedes, 'Vijf drukken van Is. De La Peyrères *Praeadamitae*', 238–242. See also Jorink, '"Horrible and Blasphemous"', 430. The first edition was in quarto, the second in small octavo, the third and fourth in decimo-sexto (with only minor differences between them, for according to Doedes they are from the same printer), and the fifth edition was in decimo-sexto as well, but somewhat smaller and less refined (Doedes, 'Vijf drukken van Is. De La Peyrères *Praeadamitae*', 239 and 241). Vossius owned the first (quarto) edition, which is used and quoted throughout this paper.

⁴⁸ [La Peyrère], *Praeadamitae*, 172–173. See also Hodgen, *Early Anthropology*, 273.

that the Flood had covered the entire earth. The Phoenicians, the Scythians, the Chaldeans and the Egyptians were much older than the Jews, as the most famous classical philosophers and historians such as Herodotus, Diodorus, Plato, Strabo and Cicero had already stated. According to La Peyrère, there was no need for God to punish the people in remote parts of the world such as China and America, because God only had reason to be angry with the Jews.

Therefore, the Flood was limited to Palestine. This could also be proven by the olive branch brought to the Ark by the dove, because there would never have been a healthy, full-grown olive branch to be found if the entire world had been flooded. 49 But theories such as these were not the only ones to incur the wrath of other scholars. People were most infuriated by his Preadamite theories. 50

Rumours about the work had spread quickly. The first to write a refutation of the work was Hugo Grotius (1583–1645), as early as twelve years before publication.⁵¹ Grotius had seen the manuscript through a friend of La Peyrère to whom the latter had given a copy after the unpublished text was banned; Grotius decided to write a refutation because he perceived the work as 'a grave threat to religion'.⁵² La Peyrère was evidently disappointed in Grotius for attacking an unfinished and unrevised manuscript. In any case, he did publish a small part of his theories anonymously in 1643.⁵³ This publication did not provoke as much criticism as the 1655 one would. As Jorink notes, it took the Dutch authorities four years to ban Spinoza's *Tractatus theologico-politicus* in 1674, which is a very long time compared to the few weeks that went by after the publication of the *Praeadamitae*, before the book was banned in the Dutch Republic.⁵⁴ This speed, however, may well have been related to the Cartesian crisis,⁵⁵ and to the impact of the early refutation by Grotius. Despite (or perhaps partly

⁴⁹ [La Peyrère], *Praeadamitae*, 207. Hodgen, *Early Anthropology*, 274.

⁵⁰ [La Peyrère], *Praeadamitae*, 203. See also Hodgen, *Early Anthropology*, 275.

⁵¹ Grotius, *Dissertatio altera*. See also Popkin, *Isaac La Peyrère*, 80.

⁵² Popkin, Isaac La Peyrère, 6.

⁵³ *Du Rappel des Juifs* (s.l. 1643). La Peyrère left out the Preadamite part of his theory (against which Grotius obviously delivered most of his critique) as well as the part about the history of the Jews. See also: Popkin, *Isaac La Peyrère*, 6.

⁵⁴ Jorink, '"Horrible and Blasphemous"', 431.

⁵⁵ Ibid., 438. The Dutch authorities may have learned from the commotion caused earlier by the philosophical theories of René Descartes, which had led to heated debates within the universities. Descartes' death in 1650 gave new impulse to the discussions surrounding his philosophy, after which Cartesianism would quickly spread through The Netherlands. See Verbeek, *Descartes and the Dutch*, 78–90.

because of) the ban, the book was widely read, and in 1656, a dozen-odd refutations, predominantly from France, Germany and the Netherlands, were published against the *Praeadamitae*. Vossius' dissertation was only partially devoted to the refutation of La Peyrère's theories. Still, the debate about the existence of men before Adam was an important part of the discussion about the true age of the world and the questions about the authority of the Bible in this discussion, as becomes clear from the large number of texts in which the *Praeadamitae* was criticized.⁵⁶

An object that may shed more light on Vossius' opinion of La Peyrère's theories is the copy of the *Praeadamitae* in the Vossius collection.⁵⁷ The quarto edition, without author's name, printer's name or place, was (as mentioned above) the first to have been printed; later editions were in octavo. It looks like the book still has its original binding of stiff white vellum, but the spine has been restored some time after the University acquired it, and the endpapers have been replaced as well, so any annotations or other additions to the old endpapers are now lost. The sturdy, unstained paper shows no sign that the book has been read very often. However, it looks like Isaac Vossius read this copy, as it contains marginal annotations that are almost certainly autograph.

In the first part of the *Praeadamitae*, which is called the *Exercitatio*, the margins are left blank until chapter 26. On page 51, La Peyrère argues that if the Chaldean astronomers were still alive, as well as the Egyptian chronologers, Aristotle, and the Chinese chronologers and philosophers, they would all be willing to accept his interpretation of Genesis. A marginal note corrects the author: 'If we followed your opinion about the time and antiquity of these peoples, we could not state anything with certainty about the origin of the world. But if we follow their true histories, and indeed the truth itself, they will agree well in all respects with Moses' traditions'. In his *De vera aetate mundi*, Vossius writes that 'there has been no lack of people who confirmed those antiquities much stronger than others defended Moses'. ⁵⁹ Although he does not automatically disapprove

 $^{^{56}}$ Popkin, Isaac la Peyrère, 81 and 194-194, nn. 6-42, gives a list of works in which the Praeadamitae is refuted.

⁵⁷ [La Peyrère], *Praeadamitae*; LUB, shelfmark 501 E 3.

⁵⁸ 'Si hanc tuam opinionem de epochis et antiquitate gentium sequamur opinionem [*sic*], tam nihil certi possimus statuere de origine mundi. Sed si ipsorum veras historias et ipsam sequamur veritatem jam omnia probe convenient cum traditionibus Moysis' (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 51 (LUB, shelfmark 501 E 3)).

⁵⁹ 'Quamvis autem odiose dictum possit videri, dicam nihilominus, non defuisse, qui fortius istas antiquitates adserverint, quam alii Mosem defenderint' (Vossius, *De vera aetate mundi*, III).

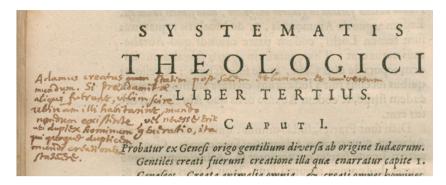


Fig. 4. Vossius' handwriting on page 108 of the *Praeadamitae* (LUB, shelfmark 501 E 3).

of people who use ancient sources to prove their point, Vossius wants to make clear that 'these gentiles do not even ascribe such great antiquity to themselves', as the scholars who use this antiquity to prove that the world is much older than the Bible indicates, and that also 'the story of Moses should not be placed in such a narrow time span', as the Jews and Christians tend to do.⁶⁰ In subsequent chapters of *De vera aetate mundi*, Vossius elaborates on this statement.

In the second part of the *Praeadamitae*, the *Systema theologicum*, most remarks are in the margins of the third book. At the beginning of chapter 1, where La Peyrère states that the Gentiles and Jews were not created at the same time, and that the Gentiles were created first, Vossius sharply notes that 'Adam was created directly after the sun and the moon and the entire world. If there were any Preadamites, I would like to know where they would have lived, while the world did not yet exist, or else, just as there was a double generation of man, so a double creation of the world would be necessary' (fig. 4).⁶¹ With this last ironic comment, as no interpretation of these verses in Genesis would ever allow for a double creation of the world, Vossius argues that it would have been impossible that other human beings were created before Adam. Here, Vossius holds on to the

 $^{^{60}}$ 'Praedictas gentes non tantam sibi tribuere antiquitatem, quantam ipsi illis affingunt, nec Mosaicam historiam in tam arcta spatia esse constringendam, quam faciunt huius seculi Judaei & qui eos sequuntur Christiani, operae fuerit pretium paucis ostendere' (Ibid., IV).

⁶¹ 'Adamus creatus statim post solem et lunam et universum mundum. Si Praeadamitae aliqui fuerunt, velim scire ubinam illi habitarint, mundo nondum existente, vel necesse erit uti duplex hominum generatio, ita qui quoque duplicem mundi creationem statuere' [sic], (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 108 (LUB, shelfmark 501 E 3)).

contemporary assumption that Adam and Eve were meant by the biblical 'man and woman', designed when God decided to create mankind after having first created the animals. On the next page, where La Peyrère states that Genesis mentions 'man and woman' as a species and not as individuals, Vossius – ever the linguist – mutters in the margin that 'then instead it should have said men and women'.⁶² A reason for discussion appears to be that Genesis 1:27, the passage they both refer to, is preceded by a sentence in which 'man' refers to all humankind.⁶³

And if there were any human beings before Adam, as Vossius adds to the second chapter, 'why was it necessary to create Adam afresh from the earth, and not rather from the seed of other men? God does not do anything outside the order of nature, except what is necessary'.⁶⁴ Vossius gives the same opinion in the *De vera aetate mundi*, where he argues that there would never have been enough water to cover the entire earth during the Flood. God would have needed to perform too many miracles to make this happen, while many parts of the world were uninhabited and did not need to be flooded. 'God does not perform miracles without reason', Vossius comments.⁶⁵

According to La Peyrère, it would have been useless if God created humans on another day than on which He created everything in nature that would be of use to them. Vossius apparently tried to state the opposite with the ironic yet somewhat puzzling comment 'obviously God did act in vain, as He was so late to show men the power and use of magnets'. The exact connection between the magnets and the passage by La Peyrère is not further clarified, but it could be that Vossius had the subject of magnetism on his mind for a future work such as *De motu marium et ventorum* (1663), while he was reading the *Praeadamitae*.

^{62 &#}x27;...tum potius dicendum fuisset masculos et foeminas' (Ibid., 109). Genesis 1:27 (Vulgate) has 'masculum et feminam'.

⁶³ Genesis 1:26–7: 'And he said: "Let us make Man to our image and likeness. And let him rule over the fish of the sea, and the flying creatures of the air, and the wild beasts, and the entire earth, and every animal that moves on the earth." / And God created man to his own image; to the image of God he created him; male and female, he created them.'

⁶⁴ 'Atqui si ante Adamum alii homines, quid opus erat Adamum e terra de novo suscitare, et non potius ex aliorum semine. Deus non facit aliquid praeter ordinem naturae, citra necessitatem' (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 114 (LUB, shelfmark 501 E 3)).

 $^{^{65}}$ 'Verum hoc est pie nugari. Deus non facit miracula frustra' (Vossius, *De vera aetate mundi*, LIII).

⁶⁶ 'Scilicet deus frustra fecit quod tam sero vim magnetis et usum mortalibus ostenderit' (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 110 (LUB, shelfmark 501 E 3)).

Vossius also disapproves of the fact that La Peyrère, who apparently perceived mankind as some sort of icing on the cake of the world, stated that the regions of the world were only finished when they were inhabited by human beings who planted and cultivated crops. Vossius points out that many regions remain deserted and unused by their inhabitants, and that a region does not need human intervention to become habitable. Another remarkable statement by La Peyrère, that Adam and Eve would have been eaten alive by wild animals if they were all alone in the world, Vossius refutes by claiming that the first animals were not dangerous at all, as there was no need for them to be, and that there would only later be carnivores and beasts of prey. 8

At the beginning of the fourth chapter of the third book, La Peyrère defends his pre-Adamic theory by arguing that Cain, who had practiced agriculture, could never have done his job without utensils such as ploughs, harrows and carts. According to Vossius, however, he has not taken into account the fact that nowadays there are also many peoples who do not cultivate crops – evidently a sign for Vossius that agricultural tools were invented by later generations. Furthermore, the fact that these people do not plough, 'does not mean that they do not have agriculture. Merely collecting fruit from trees is agriculture'.⁶⁹

Throughout chapter 4, Vossius places several other short remarks, which look like they were written on different occasions, but refer to the same paragraph. Page 125 contains four annotations in different shades of brownish ink, each looking like it was written with a different pen. These annotations consist of short remarks, namely: 'these words are not in the Hebrew and Aramaic texts',⁷⁰ 'no, in huts or rural cottages',⁷¹ 'as if there are no crop fields where there is no city',⁷² and 'of the brothers and Adam

 $^{^{67}}$ '... quasi vero etiam num hodie multae et innumerae regiones jaceant desertae et inhabitatae [sic]. Quod si homines producti fuissent ubique, uti plantae, jam nulla esset regio habitabilis quae non suos aleret et haberit incolas. Atqui hoc falsum' (Ibid., 111).

⁶⁸ 'Initio non videntur animalia fuisse nociva neque enim ulla erat necessitas cur id facerent. Postea demum id factum tumque orta σαρχοφαγία et ἀλληλοφαγία' (Ibid., 113).

⁶⁹ 'Haec omnia serius reperta. Hoc quoque tempore multae sunt gentes quae non arant. Nec tamen apud illas desunt agricolae. Vel sola fructuum arboricarum collectio facit agricolam' (Ibid., 124).

⁷⁰ 'Haec verba non sunt in textu Hebraeo et Chaldaico' (Ibid., 125). Vossius means 'Egrediamur foras [let us go outside]', as Cain said to Abel according to La Peyrère.

 $^{^{71}}$ 'imo tugurij vel casae rusticae' (Ibid.). This is in response to La Peyrère's claim that let us go outside' meant that Cain and Abel were living in a city and had to leave the city walls

⁷² 'quasi vero non sint agri ubi nulla est urbs' (Ibid.).

himself'.⁷³ Where La Peyrère mentions that Cain killed Abel with a sword, Vossius dryly remarks: 'why not with a staff or a bowl?'⁷⁴

As La Peyrère starts to cite Josephus, and claims that this man, a Jew himself, is believed to have written nothing but what he heard from a long tradition, or found out after careful reading, Vossius places only one remark in the margin: 'Nonsense',⁷⁵ a word he used various times in the margins of other books as well. He does not further explain this statement.

In the fifth chapter, La Peyrère discusses two ways of thinking about the origins of the world: one group thinks that the world is eternal and had neither a beginning, nor an end; and the other group believes that the world did have a beginning, and will have an end. Those who think that the world is eternal also believe that there is a divine being who is eternal as well, who has never been created and will never disappear. Vossius does not have to use more than simple logic to state in the margin that 'if no creation is put in place, it is foolish to establish a creator', ⁷⁶ and he would strongly refute a similar argument in De vera aetate mundi. Here, Vossius argues why the world could not be eternal – if it were, the ground would be entirely flat. Mountains erode, but never grow, he concludes from his own observations, and this would be the reason why the world needs to have had a beginning. The next question would be whether this beginning happened spontaneously, or if the world was created by God. Similar to his comment in the *Praeadamitae*, Vossius remarks that 'it is foolish to say that God exists, if there is no reason to state this'.77

At the end of the fifth chapter, where La Peyrère treads on the thin ice of interpreting the chronological calculations of the Egyptians as described by Pomponius Mela after Herodotus, Vossius writes that he has 'already shown how silly these are, and how I could derive the opposite from the Egyptians'. This remark indicates that Vossius indeed was responsible for these annotations, as in his *Observationes ad Pomponium Melam de*

 $^{^{73}\,}$ As a reaction to La Peyrère's reasoning that outside the city walls, there would be no witnesses of the murder: 'fratribus et ipso Adamo' (Ibid.).

⁷⁴ 'cur non baculum vel capidem?' (Ibid., 126).

⁷⁵ 'Nugae' (Ibid. 127). A few lines below, Vossius added 'similis similem caveat', where La Peyrère remarks that he received advice from Ismael Boulliau, who had read more on this topic in a Greek Bible manuscript, translated from Hebrew.

⁷⁶ 'Ŝi nulla statuatur creatio, stultum est creatorem statuere' (Ibid., 131).

 $^{^{77}}$ Ibid., 135. Cf. 'Stulte enim dicitur Deus esse, si nulla sit ratio quamobrem statuatur' (Vossius, *De vera aetate mundi*, II $^{\rm v}$).

⁷⁸ 'Haec jam ostendimus quam sint inepta et quam ex ipsis aegyptiis contrarium possit deprehendi' (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 135 (LUB, shelfmark 501 E 3)).

situ orbis, the same theory is referred to and rejected.⁷⁹ In the last paragraph of this chapter, La Peyrère argues that 'we little humans' can never know the exact age of the world, because even Christ had to admit that he does not know when it will end, and 'the reason of the past is the same as that of the future'.⁸⁰ Vossius underlined this sentence and placed an arrow in the margin.

At the beginning of the seventh chapter, La Peyrère discusses a story from Herodotus' 'Euterpe',⁸¹ in which the Egyptian priests led the historian into an enormous hall containing 341 colossal wooden statues, one for each generation of Egyptian kings. In total, these kinds reigned for over ten thousand years, and Vossius ironically comments that 'of course these wooden statues were so many thousands of years old'.⁸² The irony is partly explained in *De vera aetate mundi*, where it becomes apparent that Vossius did not even believe that stone mountains could become this old without at least some erosion.⁸³

Vossius underlined the word 'wiser' in the *Praeadamitae*, where La Peyrère states that the children of the Gentiles were stronger, wiser, and more perspicacious than the children of the Jews – not by knowledge of God, but by their own lineage – and comments in the margin that this is 'lied about in fairytales'.⁸⁴ He also underlines 'lineage', commenting: 'lineage is wrongly interpreted as genealogy'.⁸⁵ Where La Peyrère says that the wise man Solon, if he had descended from Adam (at his time only 3000

⁷⁹ 'Atqui juxta opinionem Platonis & ipsorum etiam Aegyptiorum, sidera non redeunt ad eundem situm, nisi quadraginta novem annorum millibus exactis. Necesse itaque fuisset ut jam tum temporis effluxissent centum & nonaginta sex annorum millia, hoc enim est spatium quatuor annorum Platonicorum. Multo itaque majorem sibi antiquitatem arrogare debuissent Aegyptii, vel saltem de tot annorum magnorum conversionibus tacere debuissent. Sed illam quam mox dedimus verissimam esse causam quod tantam sibi attribuerent vetustatem Aegyptii, fusius in ipso Aegyptiorum Regum catalogo ostendemus, quem aliquando ut spero, multo emendatiorem auctioremque in lucem dabo' (Vossius, Observationes ad Pomponium Melam, 58).

⁸⁰ 'Et si filius Dei, qua homo fuit, finem mundi nesciit; qui possumus homunciones, indagare mundi exordia? Eadem enim est praeteriti quae futuri ratio' (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 138 (LUB, shelfmark 501 E 3)).

⁸¹ I.e. the second book of Herodotus' Histories.

⁸² 'Scilicet lignei colossi tot millium aetatem ferunt' (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 144 (LUB, shelfmark 501 E 3)).

⁸³ 'Licet itaque concedatur, ut vel annis mille Platonicis oceanus unam tantum abradat unciam, non tamen efficies ut scopuli ab aeterno non fuerint consumti' (Vossius, *De vera aetate mundi*, II^r).

⁸⁴ 'in fabellarum commentis' (Ms. note by Vossius in [La Peyrère], *Praeadamitae*, 148 (LUB, shelfmark 501 E 3)).

^{85 &#}x27;generationem male interpretatur genealogiam' (Ibid.).

years ago), would certainly have noticed and then falsified the Egyptian chronologies with his invincible arguments, Vossius marginally enquires which arguments this wise Solon would have used. Ref. At the end of this chapter, Vossius places two corrections: one where La Peyrère proposes to add to the ancient chronologies also those of the ancient Phoenicians ('nonsense'); and another, where the text gives a date of 1594 for Scaliger's *De emendatione temporum* ('false', as Vossius knew that the work was first published in 1583). Ref.

There must have been other writers before Moses, as La Peyrère argues in the first chapter of the fourth book. Genesis does not contain all the information about the Creation, and Noah's Ark should not necessarily be perceived as the first ship. Therefore, it is certainly possible that Adam, who had knowledge of all the arts from his creation onward, knew how to build a ship. The marginal comment to this argument: 'Apparently, Adam was omniscient. Can it be that he also knew the use of the magnet?'⁸⁸ Again, the significance of the magnet is not explained. Vossius also defends the fact that Noah was the first to plant a vineyard, stating that the vines were already there, and that Noah was only the first to plant and cultivate them to produce wine.⁸⁹

The last remark by Vossius can be found in the seventh chapter of the fourth book. It is a comment on La Peyrère's famously controversial interpretation of Genesis 6:1–4, where people began to multiply on earth and the sons of Adam got together with the Gentile daughters. One could almost imagine how Vossius collects his thoughts after reading the quote, before he commented, maybe with a smile: 'This is ingenious, yet unseemly at the same time'.90

Conclusion

An obvious yet important point taken from the previous paragraphs is that Vossius' works were influenced by many friends, colleagues, and family members. Not only did he learn from them through conversations and correspondence; he also received or bought books from collections

^{86 &#}x27;Quo argumento?' (Ibid.).

⁸⁷ Ibid., 149.

^{88 &#}x27;Scilicet Adamus fuit omniscius. An etiam usum magnetis novit?' (Ibid., 184).

⁸⁹ 'Sponte proveniebant vineae. Noachus primus illas plantavit et excoluit ad exprimendum vinum' (Ibid.).

^{90 &#}x27;Haec ingeniosa attamen inepta' (Ibid., 203).

belonging to a wide variety of scholars and other influential connections. From the material examined, some of these connections also appeared as identifiable annotators and/or previous owners of books in the Vossius collection. It is often impossible to derive provenance information from the bindings of these books, as many books were rebound. But endpapers, title pages, and catalogue entries usually provide more details. Many previous owners will never be identified, as they did not leave any recognisable marks in the books.

Of greater interest are owners who did 'enrich' their books but cannot be identified. These owners were probably known to Vossius, and their annotations may have been important, but it requires specialist knowledge to identify hands if the annotator's name is not provided. Even if the annotator's name is known, or if his identity can be traced with some certainty, the practical use of the annotations for Vossius' research purposes is not always clear either. An annotated copy of the pseudo-Aristotelian *De mundo*, for example, could have served a variety of purposes, and deciphering the annotations can in some cases only be done by someone familiar with the subject. This problem is one of the main reasons why provenance research should ideally be a joint effort, in which many scholars add bits of information to a larger project, as mentioned in the introduction.

Fortunately, the relevance of the research question is supported by the fact that the Vossius collection happens to contain copies of almost all sources for *De vera aetate mundi* and subsequent works by Vossius. Once again, it becomes clear that the Vossius library was a well-developed research tool. Missing sources can in all cases be found in the catalogue, usually indicated as 'sold' by the university library. This abundance of books does not exclude the possibility that Vossius also borrowed books from other collections, but it is likely that he would have found enough information within his own collection, especially given the fact that his book collection used to be much larger before the two or three auctions organised from 1656 and his move to England, as mentioned by Astrid Balsem in the next contribution. Therefore, it may be concluded that Vossius did use his own books as sources for his writings; his library was sufficiently extensive.

The exact question of how Vossius *used* these books while he was writing is more difficult to answer. Firstly because the definition of 'used' could mean both using books as physical objects (how they were placed on the table, how they were opened, how the pages were turned, how

many ink stains they collected over the years), and using the content of books (handwritten marginalia as well as the printed text itself). Not much more can be said about the first definition but that Vossius did not seem to put much effort in creating a collection of beautifully-bound books in immaculate conditions. If books still have their original bindings, these often look heavily used. Obviously, this may also have been caused by later use of the books, after the acquisition by Leiden University Library. Some books show damage by fluids or rodent teeth marks, but it should be noted that many of them travelled all over Europe, and may not always have been kept or transported under optimal conditions.

From the substantial number of books annotated by others, it is clear that these annotations must have had some value to Vossius. Yet, for his *De vera aetate mundi*, he did not need to use these annotations. As he writes in the dedication to Govert Slingelandt (1623–1690), he did not have much room for elaborate theories; for this relatively short text, Vossius had to limit himself to more general knowledge, which he could 'simply' find in his books. However, as the discussion continued – especially with Georg Hornius – and Vossius started to put more time and effort into defending the authority of the Septuagint and creating a new edition of Flavius Josephus, he will have appreciated and acquired books for the collations, references and emendations in the margins.

From the annotations as well as from the text of *De vera aetate mundi* it can be concluded that Vossius spent most of his time on the chronological calculations. Several books contain corrections in chronological tables, and Vossius would even correct his own calculations in his personal copy. These annotations, as well as his marginal comments in the *Praeadamitae* and in the works by his opponents, can be perceived as a mnemotechnic device, to be used in building a strong argument. The same probably holds true for Vossius' references to Flavius Josephus in the margins of other books, which seem to indicate the importance Vossius attached to this author.

As Weststeijn and Davids state in this volume, Vossius would find his knowledge about remote continents in his books, as he never travelled very far. The negative traits – such as atheism and irascibility – of which Vossius would later be accused by his opponents, do not clearly show from the margins of the examined books. That is, the most sarcastic comments would be spared for the margins of the refutations by his three opponents, later in his career, when Vossius wanted to react to their accusations in his *Appendix*. Except for these books and the *Praeadamitae*, the analysed

books from the Vossius collection provide an image of a scholar with a strong philological interest in setting biblical matters straight. However, the information presented in this paper represents only a fraction of the entire mass of books and – equally important – correspondence still left to be studied. Forthcoming studies of the life and library of Isaac Vossius, such as the doctoral thesis of Astrid Balsem on Vossius' library, may provide different conclusions.

COLLECTING THE ULTIMATE SCHOLAR'S LIBRARY: THE BIBLIOTHECA VOSSIANA

Astrid C. Balsem

On the morning of 4 December 1690 Gerardus Joannes Vossius junior (1643–1716/17) visited Constantijn Huvgens junior (1628–1697) in London, where Huygens was serving as secretary to William III, prince of Orange (1650–1702). Vossius, a grandson of the Dutch humanist Gerardus Joannes Vossius (1577–1649) and a nephew of Isaac and his brother Gerardus, the latter of whom died in 1640 at the age of 21, was passing time in London waiting for a convoy to take him across the Channel back to Holland. Earlier that year in August, Vossius had successfully sold his uncle Isaac's library to the States of Holland. In his diary Huygens recorded some details of the conversation he had with Vossius that morning. Vossius had told him that when his uncle Isaac put up books for auction, he used to enhance their appeal with elaborate descriptions in the sale catalogue. Once, for instance, he offered a treatise of little importance, but described it as if its contents demonstrated *mathematically* that the Pope of Rome was the Antichrist. On the strength of this description alone, the treatise was sold for 30 guilders, instead of the 30 stivers it was really thought to be worth.1

Many facts and figures relating to the *Bibliotheca Vossiana*, which has been part of Leiden University Library since that year 1690, have already been published elsewhere.² Recent research has revealed new data on

 $^{^1}$ '(1690 December) 4 Maend. Smergens was Vossius bij mij, verlegen zijnde hoe en[de] met wat convoy soude wech komen . . . Vossius seyde, dat als sijn oom boecken deed verkoopen in auctien, hij die met groote tytelen in[de] Catalogus opschickte, en[de] dat eens bij een Tractaatje van weynigh importantie gestelt hadde, dat daerin mathematicé gedemonstreert wierd, dat de Paus van Roomen den Antichrist was; dat het daerop in[de] 30 g[u]l[den] gegolden hadde, hoewel geen 30 st[uivers] weerdt was.' (Journaal van Constantijn Huygens, den zoon I, 369–370). See also the contribution by Scott Mandelbrote in this volume, 95, n. 45.

² Printed catalogues of the *Bibliotheca Vossiana* mainly describe the manuscripts in this collection. See De Meyïer, *Codices Vossiani Graeci et miscellanei*; Idem, *Codices Vossiani Latini*; Boeren, *Codices Vossiani chymici*. On Vossius' cartographic material see De Vries, 'Atlases and Maps'. Only a small part of printed books (179) were described in Balsem, "*Libri omissi*". I am currently engaged in cataloguing the printed books and in provenance research. See also: Balsem, 'Books from the Library of Andreas Dudith'. Data on archival material on Vossius' collection can be found on the website of LUB.

how Isaac Vossius managed his library, especially in the period of the second half of his life, after his farewell to Christina of Sweden in 1655. The present article shows he continually added to his library, but in addition reveals which books and manuscripts he sold, how and when he sold them, and also that he occasionally bought them back. It will appear that the *Bibliotheca Vossiana* could have been at least twice as large as it is today.³ It will be demonstrated that some of the manuscripts and printed books which were sold by Vossius during his lifetime came to Leiden University Library well before 1690. Today however, they are not as easily distinguished as the manuscripts known as the *Codices Vossiani*.

The First Auction (1656)

Long before 1999, when Frans Blok published his magnificent book on Isaac Vossius and his circle of family, friends and correspondents, he had written an essay on Vossius' library.4 Both in his book and in his essay he convincingly argued that Vossius acquired many books and manuscripts in Sweden, offered to him as part of a compensation arrangement by Christina to indemnify him for the loss of his own collection and the arrears of salary. In his essay Blok provided a detailed analysis of the sale catalogue of 1656 which had been published under the name of Gerardus Joannes Vossius, proving it was not the father's library that was sold, but part of his son Isaac's collection. Blok concluded that the *Bibliotheca* Vossiana, as it is accessible in Leiden University Library today, is composed of three parts. The first was part of Isaac Vossius' own early collection, acquired before he went to Sweden in December 1648. Another part comprises books and manuscripts from Queen Christina's collection with which Isaac's father's collection had been merged. The third part, finally, consisted of new acquisitions bought or inherited by, or presented to Isaac after 1656. When Vossius returned home from Stockholm he possessed such a vast quantity of books that he was able to put a substantial number of them up for auction. The catalogue of this sale of 1656, which bore

³ The library's website officially records 729 manuscripts and about 4,000 printed books. The final number may rise to approximately 5,320 bibliographical items after cataloguing of the sections 'Libri Mathematici' and 'Libri Medici/Philosophici'. The catalogue records of these sections will be published as an appendix to my forthcoming dissertation on the *Bibliotheca Vossiana*.

⁴ Blok, *Isaac Vossius en zijn kring*. In this article I refer to the English translation: *Vossius and his Circle*; Blok, *Contributions*.

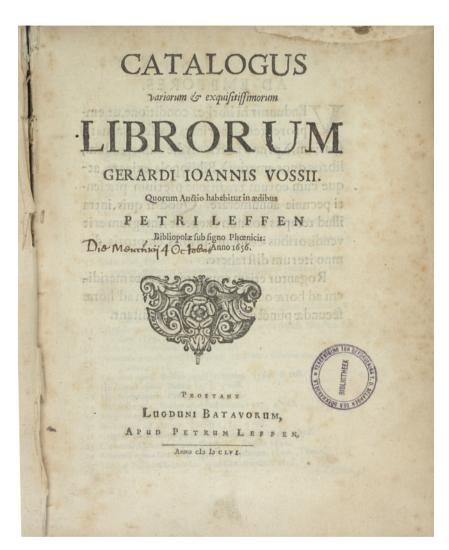


Fig. 1. Title-page of: Catalogus variorum & exquisitissimorum librorum Gerardi Ioannis Vossii. Quorum auctio habebitur in aedibus Petri Leffen bibliopolae sub signo Phoenicis. [Die Mercurii 4 Octobris] Anno 1656 (Leiden 1656) (AUB, shelfmark KVB Nv 4a).

his father's name, lists about 2,500 titles (fig. 1).⁵ Blok suggests that Isaac Vossius and the bookseller Pieter Leffen (fl. 1649–1666) used the name of Gerardus Joannes Vossius for tactical, commercial reasons. But these could only have constituted a secondary motive. During the seventeenth century several laws were passed to protect the book trade in the city of Leiden.⁶ To prevent booksellers and printers from selling off old stock of bound and unbound books at auction, an ordinance of 1639 forbade auctions of private collections of other than deceased scholars. Thus, anyone wishing to put private collections up for auction, would have to use the name of a deceased person or else sell anonymously. In 1656 Isaac Vossius by-passed this legal obstacle by using his father's name.⁷ Ten years later he took recourse to the second option.

The Second Auction (1666)

In 1848 the German librarian F.L. Hofmann devoted a brief article to a curious Dutch sale catalogue published by Pieter Leffen in Leiden in 1666, which he had found in a tract binding kept in the Stadtbibliothek in Hamburg. The books and manuscripts in this catalogue, to be sold on 30 November 1666, came from an anonymous collector (fig. 2). The books in the catalogue are arranged by format, but some of the descriptions are far more elaborate and precise than is customary in sale catalogues, although it is also true that quite a few of the annotations, such as 'extremely rare' or 'never published', are simply incorrect, as Hofmann already noted. In a cautious attempt to identify the anonymous collector, Hofmann suggested he might have been Claude Saumaise (1588–1653), as some of the books in the catalogue contained autograph annotations by Saumaise. Although this suggestion proved to be wrong, Hofmann was quite close to solving the mystery, because it can now be established that the anonymous

⁵ Catalogus variorum et exquisitissimorum librorum Gerardi Ioannis Vossii...1656. Blok, Contributions, gives a list of extant copies of which the most interesting one seems to be the Copenhagen copy with ms. annotations of prices (not seen). Blok's analysis of the catalogue includes numbers of manuscripts, printed books, languages, provenances, and so on.

⁶ Van Eeghen, De Amsterdamse boekhandel 1680–1725 V-i, 240–249.

⁷ Ibid., 244–245; Van Selm, *Een menighte treffelijcke Boecken*, 95.

⁸ Hofmann, 'Ueber einen merkwürdigen Auctionskatalog'.

⁹ Catalogus librorum illustrium ... 1666. An appendix to the catalogue of four pages contains books which were left unsold at the auction of the private collection of Johannes Woerdanus, headmaster of the Gouda grammar school, held earlier that year on the 9th of February. See the webpages of Dutch book sales on the site www.bibliopolis.nl.

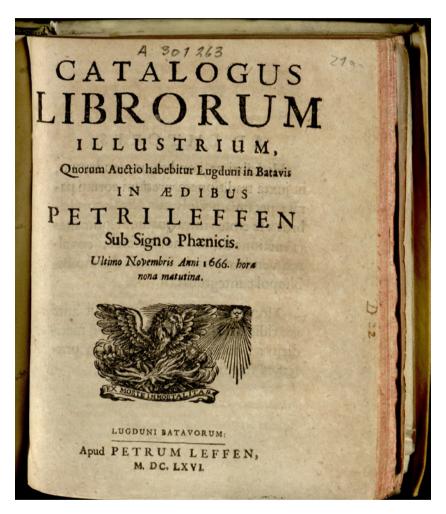


Fig. 2. Title-page of Catalogus librorum illustrium, quorum auctio habebitur Lugduni in Batavis in aedibus Petri Leffen Sub Signo Phaenicis. Ultimo Novembris Anni 1666. hora nona matutina (Leiden 1666). (Hamburg, Staats- und Universitäts-bibliothek, shelfmark A301263).

collector was Isaac Vossius, Saumaise's pupil and friend in Leiden, who later became his enemy at the Swedish court.¹⁰

Three copies of this sale catalogue have come down to us. The one in Hamburg fortunately survived the severe damage inflicted on the library during World War II; another copy is kept in Wolfenbüttel and the third is in Paris. None of these copies contain annotations of prices or buyers. On the title-page of the copy in Paris, Isaac Vossius' name has been added in ink, which in itself, of course, does not constitute proof that Vossius was indeed the anonymous collector. However, an analysis of its contents, and additional archival material found in Leiden University Library confirmed the conjecture.

The catalogue comprises fifty pages and includes 973 lot numbers. The titles do not follow the usual arrangement by subject, such as Libri Theologici, Juridici, Medici, and so on, but, as noted before, by format only, mixing printed books and manuscripts. Most of the book descriptions are in Latin, but Dutch and German books meriting a more elaborate explanation are described in Dutch. As in the previous auction catalogue of ten years before, the descriptions of the 65 manuscripts and 25 annotated books in this catalogue offer an impressive list of provenances, with names such as Cesare Cremonini, Philip Cluverius, Jacopo Corbinelli, Emperor Rudolph II, Thomas Erpenius, Giuliano Giraldi, Janus Gruterus, Josias Mercier, Nicolas-Claude Fabri de Peiresc, Claude Sarrau, Claude Saumaise, Joseph Scaliger, Petrus Scriverius, Jacques Sirmond, Jacques-Auguste de Thou, and Gerardus Joannes Vossius. All these names also frequently appear in the printed library catalogues of the *Vossiana* as former owners.

To account for Vossius' possession of some of these books, it is conceivable that he borrowed the books annotated by Saumaise and Josias Mercier, Saumaise's father-in-law – obviously never to return them – at the time when Saumaise was Vossius' tutor, a period lasting far longer than the approximately three years of mutual enmity at Christina's court.

 $^{^{10}\,}$ On the relations between Saumaise and Vossius, see the contribution by Dirk van Miert in the present volume.

¹¹ Hamburg, Staats- und Universitäts Bibliothek, A301263; Wolfenbüttel, Herzog August Bibliothek, Be Kapsel 1:14; PBnF, Q 2220. The Paris copy was reproduced on microfiche and is therefore the best accessible copy for immediate research (IDC-cat. 1866, microfiche 3125). In his quest for manuscripts of Jean Froissart, the catalogue was noticed by Dirk Schoenaers (School of Culture Areas and Language Studies, French Section, University of Liverpool), who kindly brought it to my attention.

 $^{^{12}}$ A list of the manuscripts and annotated books as they are described in the catalogue is given in Appendix 1.

Books annotated by Saumaise or Mercier do not appear in the auction catalogue of 1656. Only ten years later, and thirteen years after Saumaise's death, Vossius must have thought the time was ripe to get rid of them. Of his Parisian friend Claude Sarrau (ca. 1600–1651), Vossius offers two manuscripts with unpublished, miscellaneous, minor works. The books containing annotations by Scaliger and Isaac's own father had been brought back from Sweden by Isaac Vossius, as well as the ones annotated by Gruterus, Scriverius and Erpenius. And last but not least: the list includes the name of emperor Rudolph II. Vossius describes a manuscript psalter, once owned by the emperor, considering it extremely worthwhile as a good pastime, as each of the verses was illuminated with, often obscene, miniatures.¹³ At the end of the 'Libri in duodecimo', on the last page of the catalogue, it is announced that in addition to the manuscripts and printed books, there will also be auctioned 'a very precious quadrant, engraved on gilded metal, formerly offered to the emperor Rudolph by Tycho Brahe'.¹⁴ Only Vossius could have acquired the psalter and the astronomical instrument from Christina's library. Vossius, after all, had helped unpack the thirty barrels with art treasures and books which had been confiscated by the Swedes in Prague at the end of the Thirty Years' War. Books with annotations by Hugo Grotius (1583-1645) are missing in this auction, because Vossius had already sold them in 1656 or would keep them himself until his death in 1689.15

As a philologist and a scholar, Isaac Vossius was mainly interested in the scholarly value of classical texts and their contents. He was never a bibliophile in the modern sense of the word. He did not collect books for their external features exclusively, for the quality of the parchment used, for their binding or for their beautifully coloured illustrations, nor did he show any great interest in bibliography. As in the auction of 1656, many

¹⁴ '... Hier nevens sal verkocht werden een Geometrisch en Astronomisch Quadrant seer konstich gemaeckt en ghesneden op kostelijck vergult Metael, eertijdts door Tycko [sic] Brahe vereert aen de Keyser Rodolphus' (Ibid., [50]). It is not unusual to find scientific instruments or a set of globes or even furniture at the end of book sale catalogues in the seventeenth century.

¹⁵ See Blok, Contributions, 34-42.

¹⁶ Among the books from Prague, previously owned by Rudolph II, subsequently by Queen Christina, were the *Codices Chymici* which Vossius unsuccessfully tried to sell as a complete collection. Another one of the very special treasures Vossius had taken with him from Sweden was the *Codex Argenteus*, the Gothic translation of the Gospels written

precious, richly illustrated books and manuscripts which he could not use for his own studies, or were copies of titles he kept, are offered here, as well as catalogues of other, institutional libraries. He sells a passional, which he describes as the first book ever printed in the city of Haarlem, although I have not been able to identify this Dutch incunable, probably a blockbook. When appropriate, he adds notes like 'in membrana vetusta sine lituris' (old parchment without blemishes); or he describes the binding, such as 'in marroquin vergult' (gold-tooled morocco); or he adds observations about a book's silver fastenings etc. Obviously, everything is aimed at enhancing the sale of the books at the highest price, but when we read the catalogue thoroughly it is also obvious that Vossius enjoyed making these descriptions, something which had not always been the case. 18

Another example of his cunning sale strategy is his offer of two works on the genealogy of the Spanish and Portuguese monarchies. Number 169 of the books *in folio* is the *Nobiliario del Conde de Barcelos Don Pedro*, translated (from the Portuguese into Spanish) and edited by Manuel de Faria y Sousa, printed in Madrid in 1646. The following lot describes a manuscript with the title *Don Pedro filho del Rey Dom. Dinis, Libro das linhages de Espanha*. According to Vossius in his Latin description in the auction catalogue (in which he does not use the actual Portuguese title *Libro das linhages de Espanha*) the manuscript is far more complete than the printed edition of 1646. The Spaniards removed everything they disliked and published only one third of the original manuscript. 19 Vossius tries to

in silver and gold on purple-stained parchment. His uncle Franciscus Junius studied the manuscript and prepared an edition which was published in 1665. Isaac managed to sell the manuscript to Magnus de la Gardie, after which it returned to Sweden, for 500 *rijks-daalders*, in 1662. See Blok, *Vossius and his Circle*, 271–272, 290–291, 459.

¹⁷ 'Passionale begrijpende veel schriftelijcke figuren met de beschryvinge van dien, met houte letters ende platen gedruckt, welck ghelooft wert het eerste Boeck te zyn dat tot Haerlem ghedruckt is' (*Catalogus librorum illustrium* ... 1666, 11, no. 217).

¹⁸ In a letter to Nicolaas Heinsius written sixteen years earlier, he declares himself totally unfit for the hard labour of compiling catalogues, a task for which Germans, in Isaac's opinion, qualified in particular. But while serving as Christina's librarian he must have gained the experience and the insight that this kind of hard labour was sometimes altogether worth the trouble. See Blok, *Vossius and his Circle*, 290–291, 354–356.

^{19 &#}x27;Nobiliario de Don Pedro Hijo del Rey de Portugal, continens genealogias Hispanicas & Lusitanicas, cum notis D. Baptistae Lavañae, & Marchionis Montebello & aliorum, Madriti 1646' (*Catalogus librorum illustrium*...1666, 9, no. 169); 'Nobiliarium Hispaniae Comitis Petri filii Dionysii Regis Lusitaniae, prout ab ipso Comite Petro scriptum est, non vero ut ab Hispanis est editum, qui librum illum pessime mutilarunt vixque tertiam partem ediderunt, auferentes quidquid facit contra eos. Opus MS. & rarissimum' (Ibid., no. 170). See also Appendix 2.

encourage historians interested in the subject to acquire the manuscript and publish a new edition. He applies the same strategy with regard to an edition and a manuscript of Moschion's *De morbis muliebribus* in Greek.²⁰ The manuscript really seems to be worth buying, but now Vossius 'forgets' to mention that the paper is seriously affected by worms.

Another peculiarity of this catalogue is the fact that quite a large number of recent publications (71 titles) are offered for sale, some of which Vossius might have received as gifts, or as presentation copies. Among the English modern books published between 1656 and 1666 we find authors like Robert Boyle, John Evelyn, Thomas Hobbes and Thomas Willis. These books certainly would have been valuable additions to the sections of *Libri Mathematici* and *Libri Medici & Philosophici* in his library. The only reason I can think of for his selling them is the language they were written in. Whenever available, Vossius preferred books in Latin. For instance, he sold the English edition of Boyle's *Experimenta de coloribus*, published in London in 1664, whereas the Latin edition, printed in Amsterdam in 1667, can still be found among the *Vossiana* in Leiden.

Results of the Second Auction

The extant copies of the 1666 auction catalogue have no names of buyers or any prices paid for the books. From other sources, however, one manuscript is known to have been sold for 120 Dutch guilders. It concerns the Coptic Gospels previously owned by Nicolas-Claude Fabri de Peiresc (1580–1637) and initially bought at Vossius' second auction by Theodor Petraeus (\dagger 1672/3), a German Orientalist.

Apparently Petraeus could not really afford to buy the manuscript; two years later he still had not paid the bill. When other scholars showed their interest, Isaac lost his patience with Petraeus and sold the manuscript instead to Thomas Marshall (1621–1685), his uncle Franciscus

²⁰ 'Moschionis de morbis muliebribus liber graece, Basil 1566' (*Catalogus librorum illustrium*...1666, 23, no. 193); 'Idem Moschion MS. multo emendatior & tota praefatione auctior quam edita exemplaria' (Ibid., no. 194). See also Appendix 2.

²¹ As we can see below, Vossius at one time bought back books which he had put up for sale. Apparently he never regretted having sold the modern English books, because they are not found in the library he left to his heirs.

BIBLIOTHECAE.
14 Octoby, ex auchione Vincent, Swys
10/ 69 Casp. Hofmani in Galen. de
who washing all from 1 A - 10
20 Abr. Organ Thefaurur George 8
40 Historica Comani ex Gravi
minores Fr. Sylburgii 19 - 15
12 1/0-13 32 13
. 2 . 30 Novemb . ex auchone Vollis
12 11 Geographia A Caroli a brown cum
table & nation urbium, poincier.
episcopatuu Impeni Ro. Gr. X 11. Lahne
3 31 M. Falin Quintiliam declar Mg. 9 10
- 39 Noticia regni Poloma Ms 6 6
-12 57 Dion. Petavii Vranologium.i.
2 Naris de Ashara & plerit Gemi
119, Ac. Tatius, Hipparih 9, l'holame
Sala Greet. Offertation hb. VIII S 19
84 LIVI cyroma, I words, mela, Lucropur
10. Aurelius Vulvor, Corn. Nepor Salluffries. 10.3
10 97. Fr. Baldwinus in XII. labb 5 10
$\frac{32 - 13}{78 - 6}$

Fig. 3. Gronovius' ledger, page 1, auction Vossii (LUB, Ms. BA 1. F1).

Junius' collaborator in publishing the Gothic and Anglo-Saxon Gospels, in November 1668.²²

Other books and manuscripts were bought by Vossius' friend Johannes Fredericus Gronovius (1611–1671), librarian of Leiden University in the period 1665–1671.²³ He recorded the acquisitions he made for the university's library at auctions in 1666 and 1669 in a ledger under the heading Rationes Bibliothecae (fig. 3). This small bundle of leaves (consisting of four leaves folded into a quire of eight) narrowly escaped destruction and was saved in the nick of time from the estate of his grandson Abraham Gronovius (1695-1775), who also served as librarian of Leiden University. One of his heirs sold family papers, including J.F. Gronovius' ledger, as wrapping paper to a grocery shop, where they were recognized and retrieved by Pieter Bondam (1727–1800). Fortunately, Gronovius' notes are now safely deposited in the library's archives. They offer valuable information on dates of auctions, names of collectors, lot numbers, titles and prices paid.²⁴ Thus we know that on 30 November 1666, at the auction of (Isaac) Vossius' books, Gronovius spent 490 guilders and 12 stivers on 38 lots.²⁵ Every curator of manuscripts of Leiden University Library in the past two centuries was aware of the contents of Gronovius' notes, but it is unlikely that any of them were able to match the notes with the printed sale catalogue presented here. They did, however, already discover the connection Vossius had with the manuscripts bought by Gronovius at yet

²² 'Quatuor Evangelia veteri lingua Coptica, id est Aegyptia ante septem vel octo secula conscripta literis uncialibus in charta sericea. Ipsum hoc MS. est quod ex Thebaide advehi curavit Peireskius' (*Catalogus librorum illustrium . . . 1666*, 4, no. 81). For its eventual sale to Marshall see a letter from Franciscus Junius to Thomas Marshall, 16 October 1668, in: Van Romburgh, 'For my Worthy Freind', 1036–1038, no. 218, esp. n. 2. Hofmann, 'Ueber einen merkwürdigen Auctionskatalog', 162, also knew the price which had been paid, because it was annotated in the margins of a copy of Gassendi's Vita N.C. Fabricii de Peiresc, The Hague, 1651 (but without a shelfmark of this unique copy).

²³ For Gronovius' librarianship see Berkvens-Stevelinck, *Magna Commoditas*, 91–96. For Gronovius' relationship with Vossius see Blok, *Vossius and his Circle*, passim but esp. 109–111.

²⁴ LUB, Archief Universiteitsbibliotheek, 1595–1974 (BA1). F. Finanties. F1: [text on cover:] 'Aantekeningen van J.F. Gronovius betreffende de gelden in 1666 en 1669 voor aankoop van boeken besteed. 8 blad. quarto. In den boedel van Abr. Gronovius gevonden door Bondam bij Eyckius, die deze papieren als scheurpapier verkocht. Uit de boekerij van Bondam ging dit bundeltje over in deze Bibliotheek, gebonden zijnde achter HS. XVIII. 128 A.' The notes on the Vossius auction start on the first page, second column, and continue in two columns on the second page. The complete list is repeated on pages 10–13 with the final calculations. For the way this ledger ended up in LUB, see also Hulshoff Pol, 'Abraham Gronovius', esp. 102–103.

²⁵ A full list of lot numbers, titles, prices and actual shelf numbers is given in Appendix 2.

```
23 Maji 1669 ex auchone Tumana Had.
     Mich Glyca Annales in charte ... 1 ... 5
     Basihi opera in membranis . . . . 3. . 10
      Chryfostomi Homilia in Genelin
     To Cantacupenus in Poht Anifto:
        teler m membr. . . . .
              In Quarto
   In tota Hoppocratery cashyaces
12 Æschyli Prometheus es Septem ad
       Thebar cum Scholis m charles
15 Diversorum Sententa : July VII Sa
      pienti Elopi momb a phu Enni
      aliag plenque non edita ..... 10 ...
17 Phaland is Epi Mila m charla . . . 7 ... 10
          Latini in folio
61 Sulii Cafaris Commentari m mem . 13.
62 Augustinus de civitate Dein mem . 8...2
63 Cucroms Epla ad Fambires in
63 the Herennun Rhelessin liver which instruction 72 Plants ofthe Commedia in charles 2 warts
75 Nomis Marcellus in charle . . 7 ...
76 Marini Poloni Chromion in min . . . 10
77. Lastantii Opera . . . . .
    Mulomedicina ex graco verfa.... 8
     Fr. Porti an Elchyli trayoccias . 17 ... 10
```

Fig. 4. Gronovius' ledger, page 4, auction Junii (LUB, Ms. BA 1. F1).

another auction: on 23 May 1669 Gronovius bought 18 items at an auction of books owned by Adrianus Junius († ca. 1674), who was headmaster of the Latin grammar school on Nieuwe Zijde in Amsterdam from 1635 onwards (fig. 4).²⁶ Some of the manuscripts Gronovius bought at this auction had previously been bought by Adrianus Junius at Vossius' first auction in 1656. In this way eight more manuscripts once owned by Isaac Vossius found their way to Leiden University Library some twenty years before the *Codices Vossiani* did.²⁷

Why did Vossius once again sell so many books? Was he in need of money? Did he need room to house his collections? At the time Vossius was living in considerable comfort in a house of his own in The Hague. He enjoyed an income as the official historian of the States of Holland and he received a pension from the French king. As the sole surviving child of his parents, he had inherited their estate. In a letter to Gerardus Vossius junior in 1668, he instructs his nephew to tell Queen Christina – whom Gerardus was to meet in Hamburg and then Her Majesty might ask about Isaac's library – that as a pastime he enjoyed carpenting bookcases. This

²⁶ We do not have exact data of birth and death of Adrianus (or Hadrianus) Junius, the son-in-law of Paulus Merula (1558–1607). We know he was the tutor of a number of students who have become more famous, such as Petrus Francius, Jan van Broekhuizen, Jacob Heyblocq (who succeeded him as headmaster in 1674) and Gerard Croese, who in his (unpublished) memoirs praised and honoured Junius for his profound knowledge of classical languages. His reputation is attested by the (anonymous) sale catalogue of his library which has been found in the course of this research: Catalogus variorum insignium & rarissimorum librorum, praecipuè miscellaneorum, ut & nonnulla rariora MSS, Hebraea, Graeca, Arabica, Persica, Turcica, Chinica, &c. Quorum auctio habebitur in aedibus Cornelii Hackii, bibliopolae op de hoeck van de Houtstraet, ad diem 20 Maji 1669. Stilo novo. Lugduni Batavorum: Ex officina Cornelii Hackii, 1669. The Bibliopolis website records a copy in St. Petersburg, NL 16.22.8.134 (IDC-cat. 2966, microfiche 4564). As this copy lacks four pages with duodecimo books, we can only estimate the total number of books on sale, which must have amounted to more than 1,308 lot numbers.

²⁷ See Appendix 3 for the list of manuscripts bought by Gronovius at this sale on 23 May 1669, written down on page 4 of his *Rationes Bibliothecae*. The list corresponds with the manuscripts in the sale catalogue on pages 68, 71–72. The total number of lots obviously took several days to be auctioned, at the end of which 90 manuscripts in several languages were sold.

²⁸ His income as the official historian of the States of Holland was increased to 750 guilders a year. I thank Jaap van der Veen, who found the record in The Hague, Nationaal Archief, Archief Staten van Holland (3.01.04.01), inv. nr. 1263 (Register van resoluties genomen door de Staten van Holland waarvan de uitvoering is overgedragen aan de Gecommitteerde Raden van de Staten van Holland), d.d. 2 mei 1663. His pension from the French king was, in 1663–1671, 1,200 *livres*. This amount is mentioned by De Vries, Vossius (Isaac)', col. 1521. See also the contributions by Eric Jorink (121, 142) and Karel Davids (199–200) in the present volume.

does not seem to have been a joke. After all, at some point any avid collector of books is faced with a shortage of space to house his books.²⁹

Twice in 1664 the French poet Jean Chapelain (1595–1674) wrote to Nicolaas Heinsius (1620–1681) about Isaac's stay and activities in Paris. In a letter of 14 August he remarked that Isaac was enlarging his library by buying enormous numbers of books cheaply: 'Monsr Vossius est ici attentif à grossir sa Bibliothèque par des achats de livres à la Toise continuels et à grand marché.'³⁰ Two months later Chapelain wrote to Heinsius:

M. Vossius est toujours ici, où il ne se déplaît pas y trouvant beaucoup d'acceuil et des conversations fort habiles. Il grossit sa Bibliothèque de la dépouille de nos Libraires et leur enlève force livres qu'il connaît bien et qu'ils ne connaissent pas. Il les a eus à un tiers moins qu'ils ne lui auraient coûté en Hollande et s'en est déjà fait pour six cents écus.³¹

Two years before his second auction of books, then, Vossius was buying large quantities of books from Parisian booksellers, who had much less of an understanding of their value than the learned Vossius had, at two-thirds of the price they would have cost in Holland; he spent at least 600 *écus* on them. It is clear that Vossius needed room, if not money.

Were There a Third and a Fourth Auction?

De Vries relates that Vossius had his large library sent to England soon after he moved to London in 1670, except for a part that was sold in The Hague.³² However, although it is hard to imagine Isaac living without his library for a long period, it appears that the removal of his library to England and a (third) auction, possibly in The Hague, took place quite some time after 1670. My assumption is based on a letter which survives in the

²⁹ 'Indien haere M. quam te spreke van saeken daer ick in besig soude moge wesen, kond segge dat ick uijtgenome mijne timmeragie meest mijn tijt passeer inde boeken...' (I. Vossius to G. Vossius jr., late September or early October 1668). A digital image of the letter is available in The Waller Manuscript Collection in Uppsala University Library: http://waller.ub.uu.se/object.xsql?DBID=23087. See also Blok, Rademaker and De Vet, 'Verdwaalde papieren', esp. 104.

³⁰ Chapelain, Lettres authentiques, 424. 'à la Toise' is a quantitative measurement.

³¹ Ibid., 427.

³² De Vries, 'Vossius (Isaac)', col. 1522. Scato Gocko de Vries (1861–1937) was curator of the Manuscripts Department, later director and librarian of Leiden University, in the first decades of the twentieth century, and consequently well acquainted with the *Vossiana*. Unfortunately, he died before he had the chance to realise his plan to publish the complete correspondence between Claude Saumaise and Isaac Vossius.

Special Collections of Amsterdam University Library, along with most of Vossius' autographs.³³ Isaac Vossius wrote this Dutch letter, probably from London in April 1674, to his nephew Gerardus in the Netherlands. Isaac had always been very careless about dating his correspondence, but his nephew usually recorded the date of delivery of the letters.³⁴ Part of the letter runs:

Worthy and dear nephew

...I wish the Catalogue of Books had been sent to me before printing, because many books are scarcely recognizable and will not bring in more than one fourth of their value. This would have been different, had I been able to see the catalogue and improve it. You must buy some of the books back for me.

Then follows a list of the books he wants bought with their maximum bids in guilders. He adds by way of comment on the *Opere* of Giovambattista Birelli that it is a precious book, and completely unknown in Holland. He would also like the next item, the book by Palmerius, to be sent over as soon as possible. He advises his nephew to buy the books anonymously. The letter continues:

I request that you pack all my Manuscripts (except the *Chymici*), as well as the collated or annotated books in 4, 5 or 6 coffers or chests, and keep them ready to be sent over... I also request that you send me the catalogue of all my printed books, so I can prepare it for a new sale or auction. *But this is for your eyes only.*³⁵

The printed catalogue which Vossius is referring to in the letter has not yet been found. It is not among the Dutch book sale catalogues of the year 1674, which are available on microfilm and recorded on the *Bibliopolis* website on the internet. From the short list of books which Vossius wished to be bought back, we can guess that the catalogue must have contained

³³ A transcription of the complete letter is given in Appendix 4.

³⁴ On the correspondence between uncle Isaac and his nephew Gerardus, see Balsem, "Oude saken, finantie raekende van Oom". In this case, unfortunately, the year in the dates of delivery and response is partly illegible. Vossius wrote this letter after the death of his friend Thomas Browne, canon of Windsor, who died in December 1673, but before his uncle Franciscus Junius finally returned to settle in England in December 1674, to spend his last years with his nephew Isaac, first in Oxford and later in Windsor, where he died in 1677. Browne left his manor Southly House, as well as his books and papers, to Vossius. See also Keblusek, 'Browne, Thomas'.

³⁵ Italics for original Latin phrase; see Appendix 4.

at least another 950 items. 36 If this third auction ever took place, Vossius junior did a good job, since the folios and the quartos mentioned in the letter are still found among the *Vossiana* in Leiden.

Even more intriguing are the last two sentences: is there yet another, a *fourth* printed auction catalogue? Did Isaac Vossius ever put a part of his library up for sale in London after 1674?

All his life, Vossius continuously arranged and re-arranged his collections of books and manuscripts. We have seen how Isaac Vossius not only relished his library as a laboratory for his scholarly work and publications, but also how he managed to sell at a profit some of the treasures he had brought back from Sweden, as well as later acquisitions. Although he was not successful in selling *all* of his treasures – we must recall he never managed to sell the *Libri Chymici* – it is clear he was able to convert his profound knowledge of books and manuscripts into cash through more than one auction. The sale catalogue of 1666 shows an evolution in the compilation of such catalogues. Vossius modernized the way books are described to boost their price, he commercialized the trade while obviously enjoying himself very much as he went along. Only the illustrious Isaac Vossius, a scholar, and a very learned bookseller, could have produced the following description, which helped him get a price twenty times higher than the book was worth:

A curious German book, wherein it is *mathematically* and biblically proved, that the Pope is the true Antichrist, and the Cardinals are Bernhuyters, 1553 .

³⁶ Among others he asks for lot number 101 of the books in folio, lot number 344 of the books in quarto and lot number 496 of the books in octavo. Adding up these numbers, a total of approximately 950 lots can be calculated. See also Appendix 4.

^{37 &#}x27;...Wonderlijck Hooghduyts Buck, waer in Mathematice ende Biblice getoont werdt, dat den Paus den waren Antichrist is, en de Cardinalen Bernhuyters zyn, 1553' (Catalogus librorum illustrium ... 1666, 28, no. 283). This is a fanciful description of a cabbalistic treatise by the mathematician Michael Stifel, Ein sehr wunderbarliche Wortrechnung sampt einer mercklichen erklarung etlicher Zalen Danielis und der Offenbarung Sanct Johannis (s.l. 1553). See also the contribution by Scott Mandelbrote in this volume (95, n. 45). The term 'bernhuyter' is the Dutch equivalent of the High German 'Bärenhäuter', which is an abusive term for an indolent person. The word 'Bernhuyters' in Vossius' description probably refers directly to the title-page of the treatise which has a woodcut border, showing below a man in a bear skin. I owe the identification of this book to Cis van Heertum, Curator, Bibliotheca Philosophica Hermetica, Amsterdam. A copy of this book in the Herzogin Anna Amalia Bibliothek, Weimar, was digitized, see: http://ora-web.swkk.de/digimo_online/digimo.entry?source=digimo.Digitalisat anzeigen&a id=2287.

Appendix 1

Titles of manuscripts and annotated books as they are printed, with all errors, in: Catalogus librorum illustrium, quorum auctio habebitur Lugduni in Batavis in aedibus Petri Leffen Sub Signo Phaenicis. Ultimo Novembris Anni 1666. hora nona matutina. Lugduni Batavorum: apud Petrum Leffen, 1666. The titles marked with an * were bought by J.F. Gronovius for Leiden University Library and appear again in Appendix 2. No effort was made so far to find the present location of the other annotated books and manuscripts.

Libri	P.	No.	Title
in-2	1	1	Bibliorum Hebraicorum partes duae continentes libros historicos & propheticos, scriptae manu antiquissima, in quibus puncta &
		2	accentus recentiori manu adscripti sunt. In pergamena. Chronicon Godefridi Bullionensis, continens omnia gesta ejus in Syris & Aegypto, scriptum veteri lingua Gallica statim post ejus obitum, cum figuris. Opus integrum excepta sola praefatione. Accedit Gemondensis polyptici pars. Omnia inedita & scripta in pergamena antiquissima.
		9	De Wercken van Frossart overgeset in 't Hollandts, door Gerrit Potter vander Loo, over 250 jaren, met geillumineerde figuren, M.S.
	2	23	Strabo Casauboni Graeco-lat. 1587. plurimis in locis emendatus & illustratus manu Phil. Cluverii
		31	Quintiliani declamationes in pergamena M.S.*
		37	Xenophontis opera Graeco-lat. apud Henr. Stephanum 1581. innumeris locis emendata manu Cl. Salmasii.
		39	Notitia Regni Polonici, & insuper Livoniae, continens antiquam hujus Regni descriptionem, M.S. in pergamena.*
	3	40	Henrici Clivensis pictoris, imagines & descriptiones multarum antiquitatum, quas in peregrinatione per Italiam, Hispaniam, Turciam & praecipuè Graeciam ad vivum delineavit manu propria, opus edi coeptum, sed quod morte praeventus absolvi non potuit.
		43	Polybius Casauboni Graeco Lat. Paris. 1609. Nonnulla in eo emendata manu Salmasii.
		59	Les Ambassades & negotiations du President Jeannin, comme aussi celles de Monsieur Russi, MS. en cinq volumes.
	4	81	Quatuor Evangelia veteri lingua Coptica, id est Aegyptia ante septem vel octo secula conscripta literis uncialibus in charta sericea. Ipsum hoc MS. est quod ex Thebaide advehi curavit Peireskius.
		84	Liber MS. continens Livii Epitomen, Florum, Pomponium Melam, anonymum de Liguria, Eutropium, Aurel. Victorem, Cornel. Nepotem, Sallustium, Vegetium, & alios omnes MS.*
	5	92	Eusebius de praeparat. & demonstrat. Evangelica. Graece apud R. Stephan. 1544. manu J Merceri multis in locis emendat.
		99	Aristophanes cum scholiis Graecis, Basil. 1547. Manu Josiae Mercer. & Cl. Salmasii passim emendatus & illustratus.
		110	Pausanias Graece apud Aldum, manu Cl. Salmasii multis in locis emendatus.

Appendix 1 (cont.)

Libri	P.	No.	Title
		111	S. Basilius ed edit. Erasmi, Basil. 1532. manu viri docti collatus, cum MSS.
	6	115	Dioscorides Graece. Item Nicandri opera cum Scholiaste Graeco, apud Aldum 1499. Manu viri docti plurimis in locis emendatus & illustratus.
		116	Josippi (qui vulgo Hegesippus dicitur) historia excidii Hierosolymitani MS. in membrana vetustissima, auctior & emendatior longe quam sint exemplaria typis excusa.*
		117	Valerius Maximus in membrana vetusta MS. cum picturis elegantibus.*
		121	Zonaras Graece MS.*
		130	Annales Leonis X. Pontificis MS. continentes omnia quae de die in diem gesta sunt in aula Romana. Conscripti à Pari Crasso Bononiensi Episcopo; qui Leoni X. fuit à Ceremoniis. Opus memorabile quoque velut rerum politicarum repertorio utitur aula Romana.
		132	Is. Casauboni animadversiones in Athenaeum, Lugd. 1600. Quaedam annotavit Cl. Salmasius
	7	135	Omissa Thuanaea MS.
	8	160	Plutarchi Moralia Graecè. Basil. 1542. Mercerus opus hoc contulit cum MS. & infinitis locis emendavit.
	9	170	Nobiliarium Hispaniae Comitis Petri filii Dionysii Regis Lusitaniae, prout ab ipso Comite Petro scriptum est, non vero ut ab Hispanis est editum, qui librum illum pessime mutilarunt vixque tertiam partem ediderunt, auferentes quidquid facit contra eos. Opus MS. & rarissimum.*
		182	Jani Gruteri suspicionum libri priores octo, ipsius manu correcti & auctiores altera parte. Sequuntur XXII. libri ejusdem Gruteri suspicionum & emendationum in varios Scriptores, omnes MS. & inediti.
	10	191	Procopii historia ex editione Hoeschelii Graece. 1607. Accedunt supplementa locorum ineditorum ex codicibus Vaticanis MS.
		195	Historia de Conclavi, continens historiam omnium conclavium habitorum à trecentis fere annis MS. vol. 21.*
		199	Joannes Garzonis de origine de viris illustribus ordinis Praedicatorum, Bonon. 1517. Item MS. Chronicon Gervasii Ricobaldi Ferrariensis ante quatuor fere secula scriptum & numquam editum. Quaedam adscripta sunt margini Manu P. Scriverii.
	11	209	Jacobi Episcopi Achoriensis historia Hierosolymana & descriptio terrae sanctae MS.*
		210	Acta Concilii Florentini. Accedunt complures tractatus aliqui inediti aliqui longe auctiones [= auctiores] & meliores editis, omnia Graece MS.
		215 219	Senecae Tragediae MS. in membrana pergamena.* Claudii Sarravii tractatus MS. diversi, 1. de memoria artificiali. Ejusdem Geographica. Item de Horologiis. Ejusdem de Praefecturis & Magistratibus Franco-Gallorum liber insignis, aliaque Philologica MS. & nunquam edita.*
	12	221	Terentius in membranis vetustissimus MS.*

Libri	Р.	No.	Title
		222	A.:
		$\frac{223}{224}$	Aristoxeni Musica Harmonica emendatissima Graece MS.* Oude Keuren ende Privilegien der Stadt Leyden MS. geschreven
		1	over de 300 Yaeren ontrent met de marginale annotatien van Pet.
			Scriverius.
		225	Diversi tractatus Sedulii, Aratoris, Persii, Musica antiqua, de ludo aleae, anonymus de tropis & figuris Rhetoricis, variorum
			epigrammata, &c. omnia MS. in membranis antiquissimis.
		226	Pompae funebres Annae Reginae Franciae & Ducissae Britanniae
			cum figuris multis & coloribus ad vivum depictis in membrana
		228	antiqua MS. Olympiodorus de statu animae post mortem, item Stratonis
		220	quaestiones, de terra, Oceano, Tartaro, de facultatibus animae
			secundum Pythagoreos & Platonicos, omnia Graece. MS. &
		229	nunquam edita.*
		223	Ovidii Metamorphosis, cum multis variantibus lectionibus marginalibus in pergam. MS.
		230	Prisciani opera omnia Poëtica, Rhetorica, & Grammatica
			emendatiora longe[,] editis alicubi etiam auctiora, scripta in
		239	membrana vetustissima literis Longobardicis.* Francisci Pelsaert voyage te landt naer Agra in Oost-Indie,
			en curieuse beschrijvinge van 't Hof van den groote Mogor,
		0.40	geschreven en nimmer gedruckt.
		240	Capitula Caroli Magni MS. in pergamena antiquissima longeq; auctiora & emendatiora ac editio Sirmondi.*
			auctora & cincindationa de curto birmondi.
in-4	13	1	Justini abbreviatoris Trogi historia MS. in membrana vetusta.*
		3	Corpus Grammaticorum antiquorum ex edit. Heliae Putschii, Hanov. 1605. plurima passim in hoc opere felicissime emendata
			sunt manu Cl. Salmasii.
		4	Xenophontis Cyripaedia Graece, MS. in membrana.*
		5	Anthologia Graecorum Epigrammat. in Graece Typis Regiis, 1566.
		8	Cl. Salmasius manu plurima adscripsit & emendavit. B. Hieronymi de laude charitatis, de continentia & virginitate, &c.
			Cassianus de institutis Monachorum, & vita Eremitatarum [sic] in
			Aegypto. Anonymus de fide. Vita Malchi, & alia. Omnia MSS. in
		11	membrana antiquissima.* Caesaris comment. Graece & Latine, cum commentariis omnium,
		11	Francof. 1606. Cla. Salmasius manu sua multa loca emendavit.
		13	Sugillatio ingratitudinis Lusitanicae scripta per Caesarem de
		1.4	Menesez Archiepiscopum Lisbonensem.
		14	Terentius MS. in venerandae antiquitatis membranis, cum gloss. interlineariis. Accedit vita Dionysii Areopagitae, una cum catalogo
			omnium ejus scriptorum & ipsa in membrana antiquissima.*
	14	22	Martianus Capella cum commentariis vetustis & nunquam
			editis Remigii Antissiodonensis. Isidori, lib. 15. Etymol. Hugonis Didascalicon & alia. Anonymus de Hierarchia. Omnia MS. in
			membrana.
		24	Ovidii Metamorphoses MS. in membrana. Accedunt passim
			aliorum codicum variantes lectiones, ita ut plurium MSS. instar
			esse possit.

Libri	Р.	No.	Title
		26	Cicero de Natura Deorum, item de Divinitate, item de Legibus.
			MS in membrana vetustissima literis Longobardicis.*
	15	45	Anonymus de gradibus cognationum. Valentiniani, Martiani, Majoriani, Papiani, & aliorum Jurisconsultorum varia scripta. Item formulae Freculphi & aliorum, omnia MSS. in membrana venerandae antiquitatis.*
	16	57	Theophylacti Simocattae historia Graeco. Lat. Item chronicon Georgii Phranzae, Ingolstadii 1604. Paucula adscripsit Jos. Scaliger
	17	79	Sarravii varia opuscula Physica. Item tractatus ineditus Sandari de Sphaera, manu ejusdem descriptus
		80	Anthologia Graeca sub initium typographiae edita literis capitalibus. Accedunt scholia Graeca & emendationes ex MS. collectae manu Iani Lascaris.**
		81	Vegetius de re militari & Iulii Frontini strategemata MS. in membrana.*
		82	Vita Petri Victorii scripta Italicè per Ant. Benivenium, cum annotatis optimis Corbinelli. Accedunt & alia Italica scripta.
		83	Solini polyhistor, seu liber de statu mundi MS. in membrana vetustissima.
	19	124	Galeni methodus therapeutica lib. 15. Ejusdem duo libri ad Glauconem, omnes graecè MS
	20	148	Q Curtius Rufus de vita Alexandri Magni MS. in membrana vetustissima.*
	21	155	Sedulii libri Veteris & Novi Testamenti, item Prudentii & aliorum carmina MS. in venerandae antiquitatis membranis.
		164	Psalterium MS. aureis & coloratis ornatum figuris, ad fallendum tempus aptissimis, cum singuli versiculi singulis distincti sint icunculis ridiculis & saepe obscenis, quo olim usus est Rodolphus Imperator.
	23	188	Cremonini Tractatus ineditus physicomathematicus de Iride MS.
		194	Idem (de morbis muliebribus liber graece) Moschion MS. multo emendatior & tota praefatione auctior quam edita exemplaria.*
	24	217	Ant. Herrerae scriptum Hispanicum de Antonio Perez & motibus Arragonum. Item ejusdem relatio de rebellione & expulsione Maurorum, Hispanicè.
	25	226	Philippicae Ciceronis in membrana vetusta sine lituris MS.*
		227	Anonymi chronicon Flandriae MS. & nunquam editum aliaque.
		228	P. Mela ex prima editione & manu viri docti passim emendatus.
		229	Ausonii Burdegalensis, cum notis Scaligeri & Vineti, Burdigal. 169 Item chronicon rerum Burdigalensium, ibid. Adscripta ad oram plurima manu magni Scaligeri, tam in ipso Ausonio, quam in suis commentariis.
	26	251	Een oudt Duyts geschreven boeck van' t S. Clara, S. Franciscus dochter, ende andere Tractaetjens begrypende.
	27	257	Chronicon chronicorum Gallicè MS.*
	29	299	Alcoranus ab Erpenio translatus Latine MS.
in-8	33	4	Rhetorica contracta Ger. Joh. Vossii, aucta & emendata manu auctoris.
		11	Sallustius in vetustissimis membranis MS.

Appendix 1 (cont.)

Libri	P.	No.	Title
		14	Hygini Astronomicon Poëticon, item Juliani Toletani Prognosticon futuri seculi ad Idatium & alia quaedam MS. in membrana antiqua.
	34	25	Ivonis Carnotensis [sic] Epistolae, Hieronymi & Gelasii Papae aliqua, Eunuchus Terentii & alia MS. in pergamena vetustissima.*
	35	57	Eutropius, Festus Avienus, Aurelius Victor, Aethici Cosmographia & alia partim in charta partim in membranis MS.*
	36	80	Liber antiquus in pergamena, continens gesta Mariae, cum picturis illuminatis.
	37	105	Opera di Dante Alighieri. Florentiae 1595. ab Academicis Florentinis collatus cum nonaginta & uno MSS. Accedunt insuper collationes Mstae Iul. Giraldi ex aliis depromtiae [sic] MSS.
		107	Iuliani Apostatae Misopogon & Epistolae, Graeco lat. Paris. 1566 collatae a viro docto cum MSS.
		114	Plutarchi opera Graece, ibid. (Paris) Tom. 6. infinitis locis emendata felicissime manu Cl. Salmasii.
38 120 Ciceronis Rh		120	Ciceronis Rhetorica ad Herenn. ejusdem libri de inventione MS. in pergamena vetusta.*
	40	166	Valerius Flaccus cum notis Carrionis, apud Plantin. 1565. Jos. Mercerus quaedam manu sua annotavit.
	41	188	Eunapius de vitis Philosophorum Graeco Lat. 1516. Quaedam manu sua emendavit Ios. Mercerus.
		192	Senecae quaestiones naturalis. Item Plinii Secundi Iunioris epistolae MS. in pergamena.*
	46	292	Variae lectiones Mureti, Aug. Vind. 1600. paucula manu sua adscripsit Jos. Scaliger.
	49	337	Epigrammata veterum Poetarum Pythaei, Paris. 1580. Quaedam manu sua emendavit Jos. Mercerus.

^{*} See also Appendix 2.

** It is unclear whether this is the edition of Florence 1494 or an earlier unknown edition with Lascaris' manuscript additions.

Appendix 2

Manuscripts and printed books bought by J.F. Gronovius for Leiden University Library at the auction of Isaac Vossius, November 30, 1666. The titles were transcribed from the auction catalogue. The prices paid for them and, if available, the actual shelf numbers were added.

	Cat. No.	Title	Price paid	Shelf no. in Leiden UL
1	in-2 11	Geographia sacra Caroli à S. Paulo, cum tabulis Geographicis. Accedit Notitia omnium Urbium, & Provinciarum, & Episcopatuum Imperii Romani ex Biblioth. Reg. Graece & Latine, Paris.	8:5	See n. 1
2	31	Quintiliani declamationes in pergamena M.S.	9:10	BPL 9
3	39	Notitia Regni Polonici, & insuper Livoniae, continens antiquam hujus Regni descriptionem, M.S. in pergamena.	6:6	BPL 10
4	57	Uranalogium Petavii Graeco Lat. Paris. 1630	5:19	713 A 14
5	84	Liber M.S. continens Livii Epitomen, Florum, Pomponium Melam, anonymum de Liguria, Eutropium, Aurel. Victorem, Cornel. Nepotem, Sallustium, Vegetium, & alios omnes MS.	10:3	BPL 19
6	97	Fr. Balduinus in leg. 12 tabularum, & leges Romuli, Lugd. 1583	5:10	See n. 2
7	107	Bartholomaei Venusini Lucullianae quaestiones, Basil. 1564	5:0	See n. 3
8	116	Josippi (qui vulgo Hegesippus dicitur) historia excidii Hierosolymitani MS. in membrana vetustissima, auctior & emendatior longe quam sint exemplaria typis excusa.	28:5	BPL 21
9	117	Valerius Maximus in membrana vetusta MS. cum picturis elegantibus.	17:5	BPL 26
10	121	Zonaras Graece MS.	11:15	BPG 8
11	126	Monumenta Patavina Sertorii Vrsati, cum figuris, Patavii 1652	7:15	426 B 24
12	166	Marini Becichemi Scodrensis castiga[t] iones in diversos Autores variaque opuscula Critica & Philogica, impressum alicubi in Dalmatia. Item Jo. Baptistae Pii variae lectiones & annotationes, Bononiae 1505. Formulae Latini sermonis ordine Alphabetico Steph. Doleti, Lugd 1539	10:0	1402 B 16:1-3

Appendix 2 (cont.)

	Cat. No.	Title	Price paid	Shelf no. in Leiden UL
13	169	Nobiliario de Don Pedro Hijo del Rey de Portugal, continens genealogias Hispanicas & Lusitanicas, cum notis D. Baptistae Lavañae, & Marchionis Montebello & aliorum, Madriti 1646	6:15	421 B 13
14	170	Nobiliarium Hispaniae Comitis Petri filii Dionysii Regis Lusitaniae, prout ab ipso Comite Petro scriptum est, non vero ut ab Hispanis est editum, qui librum illum pessime mutilarunt vixque tertiam partem ediderunt, auferentes quidquid facit contra eos. Opus MS. & rarissimum.	See n. 4	BPL 2017
15	195	Historia de Conclavi, continens historiam omnium conclavium habitorum à trecentis fere annis MS. vol. 21.	40:0	BPL 2016
16	209	Jacobi Episcopi Achoriensis historia Hierosolymana & descriptio terrae sanctae MS.	4:10	BPL 42
17	215	Senecae Tragediae MS. in membrana pergamena.	8:0	BPL 59
18	219	Claudii Sarravii tractatus MS. diversi, 1. de memoria artificiali. Ejusdem Geographica. Item de Horologiis, Ejusdem de Praefecturis & Magistratibus Franco-Gallorum liber insignis, aliaque Philologica MS. & nunquam edita.	5:0	BPL 77
19	221	Terentius in membranis vetustissimus MS.	15:5	BPL 53
20	223	Aristoxeni Musica Harmonica emendatissima Graece MS.	4:5	BPG 38
21	228	Olympiodorus de statu animae post mortem, item, Stratonis quaestiones, de terra, Oceano, Tartaro, de facultatibus animae secundum Pythagoreos & Platonicos, omnia	13:5	BPG 36
22	230	Graece. MS. & nunquam edita. Prisciani opera omnia Poëtica, Rhetorica, & Grammatica emendatiora longe[,] editis alicubi etiam auctiora, scripta in membrana vetustissima literis Longobardicis.	29:5	BPL 67
23	240	Capitula Caroli Magni MS. In pergamena antiquissima longeq; auctiora & emendatiora ac editio Sirmondi.	8:5	BPL 22
24	in-4 1	Justini abbreviatoris Trogi historia MS. in membrana vetusta.	15:15	BPL 89
25	4	Xenophontis Cyripaedia Graece, MS. in membrana.	20:15	BPG 48

Appendix 2 (cont.)

	Cat. No.	Title	Price paid	Shelf no. in Leiden UL
26	8	B. Hieronymi de laude charitatis, de continentia & virginitate, &c. Cassianus de institutis Monachorum, & vita Eremitatarum [sic] in Aegypto. Anonymus de fide. Vita Malchi, & alia. Omnia MSS. in membrana antiquissima.	10:5	BPL 98
27	14	Terentius MS. in venerandae antiquitatis membranis, cum gloss. interlineariis. Accedit vita Dionysiii Areopagitae, una cum catalogo omnium ejus scriptorum & ipsa in membrana antiquissima.	27:0	BPL 109
28	26	Cicero de Natura Deorum, item de Divinitate, item de Legibus. MS in membrana vetustissima literis Longobardicis.	15:15	BPL 118
29	45	Anonymus de gradibus cognationum. Valentiniani, Martiani, Majoriani, Papiani, & aliorum Jurisconsultorum varia scripta. Item formulae Freculphi & aliorum, omnia MSS. in membrana venerandae antiquitatis.	20:0	BPL 114
30	81	Vegetius de re militari & Iulii Frontini strategemata MS. in membrana.	11:15	BPL 128
31	148	Q Curtius Rufus de vita Alexandri Magni MS. in membrana vetustissima.	17:10	BPL 137
32	194	Idem [193. Moschionis de morbis muliebribus liber graece, Basil 1566] Moschion MS. multo emendatior & tota praefatione auctior quam edita exemplaria.	3:5	BPG 62A
33	226	Philippicae Ciceronis in membrana vetusta sine lituris MS.	23:5	BPL 148
34 35	in-8 25	Chronicon chronicorum Gallicè MS. Ivonis Carnotensis [sic] Epistolae, Hieronymi & Gelasii Papae aliqua, Eunuchus Terentii & alia MS. in pergamena vetustissima.	0:9 10:15	BPL 178 BPL 189
36	57	Eutropius, Festus Avienus, Aurelius Victor, Aethici Cosmographia & alia partim in charta partim in membranis MS.	9:12	BPL 188
37	120	Ciceronis Rhetorica ad Herenn. ejusdem libri de inventione MS. in pergamena vetusta.	7:5	BPL 195
38	192	Senecae quaestiones naturales. Item Plinii Secundi Iunioris epistolae MS. in pergamena.	6:4	BPL 199

 $^{^1}$ The copy bought at the auction was sold by Leiden UL in 1752. A copy of the same book, annotated by Thomas Browne, which entered the library in 1690 has been kept ever since with shelf no. 574 A 11.

 $^{^2\,}$ Idem. Leiden UL has never had another copy. $^3\,$ Idem. Leiden UL kept the copy formerly owned by B. Vulcanius, shelf no. 356 A 10:2.

⁴ One price was paid for nos. 169 and 170 together.

Appendix 3

Manuscripts bought by J.F. Gronovius for Leiden University Library at the auction of Adrianus Junius, 20[-23] May 1669

P.	No.	Titles as printed in the sale catalogue, with all errors	Price paid		Provenance / Bought by A. Junius in:
Libri Maı	ıuscri	pti Graeci			
in-2 68		Michaelis Glycae annales à condito mundo ad sua tempora in chartâ non editi.	1:5	BPG 2	Transcript by Thomas Browne of Voss. Gr. F. 9.
	3	Basilii Opera, in pergamena.	3:10	BPG 1	Auction Vossius 1656, p. 4, no. 113
	4	Chrysostomi Homiliae in Genesin in pergamena.	3:8	BPG 22	Auction S. Sixtinus 1650, p. 63, no. 6
	6	Joannes Cantavicenus in politica Aristotelis in pergamena.	4:0	BPG 16B	Auction Vossius 1656, p. 65 (post p. 104), no. 12
in-4	11	In totum Hippocratem castigationes.	0:15	BPG 67O	Scripsit Bonaventura Vulcanius
	12	Duae Tragoediae Aeschyli. Prometheus & septem ad Thebas cum scholiis interlinearibus nondum editis, in chartâ.	7:10	BPG 51	Scripsit Georgius Hermonymus; auction H. Commelinus 1606, p. 92
	15	Diversorum doctorum virorum sententiae: dicta 7 sapientum: Aesopi monita ad filium Ennium, multaque alia, pleraque non edita in chartâ.	10:0	BPG 108	Transcript by Thomas Browne of Voss. Gr. Q. 68 and Q. 53
	17	Phalaridis Epistolae auctiores editis, in chartâ.	7:10	BPG 58	Auction Vossius 1656, p. 85 (=81), no. 20
Manuscri	pti La	atini			
in-2 71		Julii Caesaris Commentarii in pergamena, splendido charactere	13:0	BPL 27	Auction Vossius 1656, p. 95, no. 38
	62	Augustinus de Civitate Dei, in pergamena.	8:2	BPL 12	Auction Vossius 1656, p. 65 (post p. 104), no. 2
	63	Ciceronis Epistolae ad familiares, in chartâ.	2:12	BPL 49	
	64	Auctor ad Herennium en Rethorica [sic] opera Ciceronis & Salustius, uno volumine, in chartâ.	2:10	BPL 50	
	72	Plautus octo Comoediae, in chartâ.	2:10	BPL 60	Auction Vossius 1656, p. 65 (post p. 104), no. 11
in-4 72	75	Novus [sic] Marcellus, in chartâ.	7:0	BPL 159	Auction Vossius 1656, p. 87, no. 45

Appendix 3 (cont.)

Р.	No.	Titles as printed in the sale catalogue, with all errors	Price paid		Provenance / Bought by A. Junius in:
	76	Martini Poloni chronicon, in pergamena.	0:10	BPL 134	Auction Vossius 1656, p. 10, no. 139
	77	Lactantii Opera, rudi quidem manu, sed valdè emendata scriptus, [sic]	1:0	BPL 142	1
	78	Mulo medicina, sive de curandis perudum morbis, liber de graeco versus.	0:8	Vul. 90B	
	79	0	17:10	BPL 180	

Appendix 4

Transcription of an autograph letter of Isaac Vossius to his nephew Gerardus Joannes Vossius, April [1674]. UBA Hs. A 14(a)

The existence of a third, and even a possible fourth, auction of books from Isaac Vossius' library, is based on this letter which Isaac sent either from London or Windsor, to his nephew in, presumably, The Hague. The letter begins with a warning not to mention to anyone anywhere the reason why, for the time being, he will not come over to Holland. His nephew could have learnt the reason why from the letter Isaac wrote at the same time to his uncle Franciscus Junius, who lived in Isaac's house in The Hague at that time, about the will of Thomas Browne (D. Braun). Browne, who died in December 1673, left both his manor Southly House near Windsor and his library to Isaac Vossius. Although Isaac expects to receive a considerable amount of money from this inheritance in the end, until that time he has had to spend 1,500 guilders on sollicitors and fees. Gerardus has to deal with the people (the supplier of bricks and grit Schral, the plumber Colijn, the carpenter Burg, an anonymous architect, a cabinetmaker, a pumpmaker, a stonedresser etc.) who are building or rebuilding a house for Isaac, again probably, in The Hague. Isaac cannot believe his nephew needs another 1,500 guilders to pay them off. He thinks he owes them much less. If the architect does not cooperate, Gerardus should ask advice from councillor Goes.

Isaac wishes that his uncle Junius would make the decision to come over to join him in Windsor, in the company of Willem Hadriaan van Nassau, lord of Odijk (erroneously referred to by Isaac as *Andick* or *Andijck*, brother of Isabella Bennet, countess of Arlington). If his uncle would agree and his health would allow it, his luggage could be sent over together with Isaac's manuscripts and annotated books, which his nephew is asked to pack in a number of coffers. He (Isaac) would ask the countess of Arlington if she would ask her brother to take the ten coffers along with his own luggage when he was to come over to England.³⁸

Weerde en lieve neef

T'geen ik inde brief aen Oom Junius schrijf nopende de woorden vant testament van D. Braun, moet bij UE blijven, opdat de gepraetendeerde crediteuren, verstaende de uijtstel van mijne overkomste niet meerder haer ooren opsteeken. Kan mij niet genoeg verwonderen wegen de vijftienhondert gulden die UE schrijft te mankeren tot hun volkome betalinge. Buijten de hondert rijxdaelders die te betalen sijn aen Schral voor livrancie van steenen en tras, is niemant die met recht vijftich gulden toekomt. Colijn sal niet een penning hebben, is mij schuldig, en is geobligeert de kelder dicht te maken. Burg de timmerman heeft

³⁸ Willem Hadriaan van Nassau was to serve as one of the ambassadors in the Dutch embassy to settle the second agreement of Westminster, which ended the Third English War between England and the Dutch Republic. Gerardus Joannes Vossius jr was one of the gentlemen in the embassy. See Dibbets, *Predikant en toerist*.

ook meerder als hem toekomt, doch sal op een weijnich niet sien bij aldien hij discretie wil gebruijken. Den architect kan UE te kennen geven soo hij voor mijn overkomst (want soo is best dat UE bij hem spreekt) liquideert op de beste manier en menage, de overige restanten van mijne timmerage, dat ick met hem liberalijck sal handelen. De schrijnwerker opmakende de vensters etc, quam niet meerder te betalen volgens accoort als sessendertich gulden. De pompmaker de pomp dicht makende quam ses gulde. Den steenhouder vierentwintich gulden. UE sal wel doen al hun pretensie mij overtestueren, met de kopie van t'geen sij ontfangen hebben. Bij aldien den architect de geck speelt sal een ander uijtvinden die het timmeren verstaet, en mogelijck sal Raetsheer Goes t'selve niet refuseren, kan hem daer toe genoegsam obligeren. Soude wel wenschen dat Oom Junius de resolutie kost nemen om met de Heer Andick overtekomen, soo het sijne gesontheijt toelaet. Dewijl ick nu eerst in possessie ben geraekt van de goederen van D. Braun, heb noch niet ontfangen, doch sal eersdaeg goede somme te ontfangen hebben, waer van ick sal schrijven met den naeste, doch is meer als vijftienhondert guldens aen rechtgeleerden en segels vervlogen. Had wel gewenst dat de Cataloog van Boeken mij was overgesonde geweest voor den druck, dewijl veel boeke seer qualijc te kennen sijn, en niet het vierendeel van hun weerdije sullen gelden, t'geen anders soude geweest sijn bij aldien ick de cataloog hadde mogen sien en verbeteren. UE moet voor

[verso:]

mij eenige boeken weder inkoopen voor mij [sic], als bij exempel in fol. Paulina tot 10 of 12 gulden

Item numero 101. Socratis et Hermiae Histor. Eccles. als wesende de tweede tom. van Historia Ecclesiastica Eusebij met Valesius noten, die UE onder mijne Historicos sult vinden. tot 14 guld.

In 4. num. 37. Sidera illustrium et SS. viroru<u>m</u> in Germania Brouweri. tot 4 g.

Num. 340 – L'ambassade de Fugeroa par Vicquefort tot 3 a 4 guld.

Num. 342 – Opere di Giovambattista Birelli. a Fiorenza tot 12 gu. wesende een kostelijc boek en dat niemant kent in Hollant.

Num. 344. Jacob. Palmerij exercitationes, die ick versoek dat mij met den eerste werde overgesonde. tot 5 guld.

In 8, Num. 370 Leo Allatius de Psellis tot twee guldens of meer

Num. 496. Arriani et Mauricij tactica Schefferi tot 3 g.

Dese versoek ick dat UE op een ombekende [*sic*] naem weder doet inkoopen. Soude mede goet wesen weder intekoopen den Tacitus bij Dionysius sal. besc[h]reven uijt de observatie van Grotius, soo het deselve sij die ick geloof.

Versoek dat UE al mijne MSS (uijtgenome de Chymische) als mede de gecollationeerde ofte bij mij beschreve boeken pact in 4, 5, ad 6 coffers of kisten, en de sellevige gereet hout om overteseijnden met de heer van Andijck. Indien Oom dese gelegentheijt behaegt, konnen gelijck als sijn bagagie overgesonden werde[.] Sal toekomende vrijdach dat is overmorgen soo ik hier noch blijf dien dag overseijnden een recommandatie ofte versoek van Mevrou de gravinne Arlington aen haer broeder [deleted: suster], om ses acht ofte tien koffers Oom Junius ofte mij toebehorende met sijn bagagie overtevoeren.

Versoek mede dat UE mij overseijnt de cataloog van al mijn gedructe boeken, opdat ick de selve praeparere tot een nieuwe vendue ofte auctie. *Sed haec tibi soli.*'

[in the lefthand margin below:] 'ontvangen den 18 april / beantwoort den 20 april $\lceil 1674 \rceil$ '

EPILOGUE: ISAAC VOSSIUS IN CONTEXT

Eric Jorink and Dirk van Miert*

On 15 August 1659, the French librarian and astronomer Ismael Boulliau (1605–1694) wrote to Christiaan Huygens, to thank him for sending a copy of the *Systema Saturnium* (1659), the booklet in which Huygens made public his telescopic observations of Saturn, and his theory of the rings surrounding the planet. After a rather short and customary word of thanks, Boulliau continued:

Je n'ay pas encores achepté le Pomponius Mela de Monsieur Vossius, je le veux voir pour prendre cognoissance de qu'il dit touchant les refractions... Je ne blasme pas son opinion touchant la Chronologie des 70. qu'il soustient. car il n'y a pas d'apparence que le texte & la version des Lxx. puisse estre rejettee ny condamnee; puis que les Evangelistes les Apostres & toute l'Eglise Orientale, ne se sont jamais servis que de cette version Greque, qui passe soubs le nom des Lxx qui a esté certainemant faicte a diverses fois, sur des originaux Hebreux qui avoient differentes leçons, & diverses personnes. Et a le bien prendre la predication de la Religion Chrestienne, qui dans ses commencemens par les Apostres a esté preschee & ecrite en Grec, n'est point fondee sur le texte Hebraique, dont les Hebreux Hellenizans ne se servoient plus vulgairement & ne l'entendoient pas mesme: vous scavez que Philon le plus scavant & le plus honneste homme entre les Hebreux d'Alexandrie du temps de Tibere & Caligula n'entendoit point l'Hebreu...¹

Huygens' *Systema Saturnium*, which included a laudatory poem by Nicolaas Heinsius, was published by the same publisher – Adriaen Vlacq (1600–ca. 1667) of The Hague – in the same year as Vossius' *De vera aetate mundi*, and addressed to the same audience. At that time, it was not evident that later generations would deem astronomical discoveries of greater importance than discussions on the true age of the world, nor that Christiaan Huygens would become one of the icons of the Scientific Revolution, and that Isaac Vossius' fame as a natural philosopher would vanish as quickly as it had come.

^{*} Again, words of thanks to Anthony Ossa-Richardson.

¹ Boulliau to Christiaan Huygens, 15 August 1659, OCCH II, 466.

We hope that the contributions to this volume have demonstrated that Isaac Vossius played a rather important role in the European world of learning between 1658 and 1689, the year of his death. After his uneasy departure from Oueen Christina's court in Stockholm, and starting with the publication of his comments on Pomponius Mela's De situ orbis, Vossius managed to transform himself from a silent philologist and librarian into a well-known – although not uncontroversial – author of books on the nature of light, the age of the world, the cause of the tides and winds, and a range of other subjects. Rather than being an eccentric libertine, Vossius belonged to the world of philologists, natural philosophers, alchemists, curieux and virtuosi which, as research in the last decades has made abundantly clear, characterised intellectual life in Europe in the second half of the seventeenth century.² Vossius knew Huygens, Oldenburg, Spinoza, Kircher, Hooke and Newton personally, and shared many of their interests, including alchemy, prophecies, the chronology of ancient kingdoms and empires, telescopic and microscopic observations, and the cultures of non-Western civilizations. His correspondence and notes, and the inventories of his library, reveal that he was aware of, and involved in, the cutting-edge scholarship of the time. Vossius was at centre of the communities from which the Royal Society and the Académie Royale des Sciences would emerge. Although he made no lasting scientific contributions, his work in the fields of chronology, natural philosophy and geography were highly original and well known, especially in the 1660s, a period in Vossius' career that thus far has received little attention, but that on closer inspection turns out to be as important for his biography, as for our understanding of contemporary scientific culture in Europe at large. To a certain extent, Vossius can be regarded as exemplary of intellectual life in North-Western Europe in general and the Dutch Golden Age in particular. He was as much a product of the humanist tradition as an adept of the new empirical approach; as much guided by the biblical tradition as inspired by a rational attitude towards the world. In a century not yet divided by disciplinary boundaries, Vossius had the explicit ambition to describe and explain the whole world around him. That makes him comparable as much to Athanasius Kircher (1602–1680) as to René Descartes (1596-1650) - whom he had known all too well. Not only in

² See, for example, Van der Wall, *Petrus Serrarius*; Mandelbrote, 'Newton'; Findlen ed., *The Last Man Who Knew Everything*; Boas Hall, *Henry Oldenburg*; Cook, *Matters of Exchange*; Grafton, *Worlds made by Words*; Dew, *Orientalism*; Hunter, *Robert Boyle*; Bod, Maat and Weststeijn, eds, *The Making of the Humanities*.

terms of ambition, but also in terms of imagination. Kircher and Vossius are often dismissed as having been too credulous – but it is worth recalling Descartes' explicit ambition to grind lenses so powerful that he could watch the inhabitants of the moon, to give just one example of many which could be quoted to ridicule the founder of rationalism.³ From the contributions to this volume, it might become plausible that Vossius, after first having chosen Scaliger and Saumaise as models to be emulated, in the 1660s turned to Descartes.

Be this as it may, after Vossius settled in England in 1670, his interests appear to have wandered from the Cartesian challenge, and to have returned to their original focus, classical philology. His reputation as a student of nature became somewhat disputed, if not the object of outright ridicule. At the same time, his reputation as a challenging classicist and philologist was re-affirmed with his work on the recitation of ancient poetry and the power of rhythm; the Sibylline oracles; and his edition of Catullus. Vossius' *De Poematum cantu et viribus rythmi* (1683) and *Caius Valerius Catullus et in eum I. Vossii observationes* (1685) were only mentioned in passing in this volume, but should be the object of closer study.

Surveying the second part of Vossius' life, a few general remarks could be made, and some questions could be asked. Vossius' rich oeuvre appears less disparate and more coherent than is usually assumed, with regard both to the subjects he addressed and to the methods he used. Although often considered naive and credulous, one of the characteristics of Vossius' works seem to be his rather rational approach towards the many subjects he addressed, and not taking things for granted. The phenomena Vossius studied were, first of all, considered within a conceptual framework presupposing an orderly cosmos. Vossius wanted to explain natural and historical phenomena in a rational way, without taking refuge in faith, mythology, or praeter- and supernatural explanations. He was constantly looking for evidence; not only in ancient sources, but in contemporary descriptions, observations and calculations as well. After weighing and balancing, he sometimes arrived at conclusions that were implausible or later proved wrong. But although many of his enquiries turned out to end in blind alleys, his method was surprisingly consistent. It unified the traits of Scaliger's philological approach, Cartesian reasoning, and the spirit of the Royal Society. One question that needs closer study is the exact role of empiricism and observations in Vossius' exercises in optics, natural

³ Descartes to Ferrier, 13 November 1629, AT I, 69.

philosophy and geography – to what extent did he perform experiments himself, for example? Remarks and images in his books and letters suggest that he sometimes did, but much is still unclear.

Vossius was clearly one of the most important philologists of his time. Van Miert and Grafton have demonstrated that Isaac was much more the product of the daring French school of Scaliger, Casaubon and Saumaise – well aware that their philological exercises were potentially harmful to the textus receptus of the Bible – than of his own father, the pious and irenic Gerardus Joannes. As Grafton put it: Where Gerardus had built bridges, Isaac burned them'. 4 Isaac's role in the emerging radical biblical criticism of the second half of the seventeenth century was recognized a long time ago, although its precise nature is still far from clear, to say the least. In his often-quoted article of 1993, David Katz described Vossius' relations with the English biblical critics in vivid detail.⁵ Eight years later, Jonathan Israel stated in his influential *Radical Enlightenment* that Vossius' biblical criticism should be viewed not from the British context or in relation to the work of Richard Simon, but as having been influenced by the 'rise of powerful new philosophical systems, rooted in the scientific advances of the early seventeenth century'. 6 The most important factor in this process, according to Israel, was the radical biblical criticism of Spinoza:

The key feature of the tradition of Bible interpretation instituted by Spinoza, and elaborated by Meyer, Koerbagh, Isaac Vossius, Goeree and later Toland...was precisely *its strictly philosophical character, its use of philosophy* not just to uncover discrepancies in the Biblical text or elucidate perplexing passages in the light of historical context, but to assess its significance, thereby completely detaching our view of Scripture from any theological grounding and ecclesiastical authority.⁷

In earlier publications, Jorink has adopted yet another approach by proposing a link from La Peyrère via Vossius to Spinoza. In the present volume Grafton suggests that Vossius moved away 'from traditional humanism into something like late seventeenth-century radical criticism'. As such he may even have paved part of the way for Spinoza, drawing the conclusions of philology as inherently radical because 'it tended, over time,

⁴ See Grafton, above, 70.

⁵ Katz, 'Isaac Vossius and the English Biblical Critics'.

⁶ Israel, Radical Enlightenment, 14.

⁷ Ibid., 449, emphasis added.

⁸ Jorink, "Horrible and Blasphemous"; Idem, Reading the Book of Nature, 97–105; 408–410.

to diminish the authority of all texts, even those generally deemed to be sacred'. This would imply that Spinoza's radical biblical criticism rooted in humanist philology, an idea which contradicts the radical break which Spinoza made with all past traditions, according to Jonathan Israel. On the other hand, it does agree with Israel's idea that Vossius had something in common with the kind of Biblical interpretation instituted by Spinoza.¹¹ The only point is that Vossius did not 'elaborate' on a Spinozist tradition, because his De vera aetate mundi appeared more than a decade before the Tractatus theologico-politicus (1670). Mandelbrote, moreover, points out that Vossius' reasons for taking a radical approach to the biblical past had very little to do with the contextual criticism of Simon or Spinoza, both of whose ideas he explicitly rejected. Vossius and Spinoza moved in the same intellectual and personal spheres, but the nature of their contacts and the possible mutual influence will perhaps remain unclear forever, due to a lack of sources. We know they met, but the only clue, the remaining (and heavily edited; no autograph left) correspondence of Spinoza, mentions an encounter in 1667, when they were reported to have discussed alchemical experiments.12

The case of Spinoza and biblical criticism brings us to the point of Vossius' religious convictions. What did he believe, and what not? From early on in his career, notably during his tumultuous stay at the court of Queen Christina, Vossius was surrounded by rumours of being a freethinker, a libertine or an outright atheist. The controversy following the publication of De vera aetate mundi and Vossius' work on the Septuagint had no positive influence on his reputation either. Yet, Vossius' marginal notes in La Peyrère's Praeadamitae, as uncovered by Susan Derksen, show that he assumed the existence of God, and was seriously concerned with the status of the Bible. This is not at odds with Grafton's remark on Vossius' growing radicalism; but it should make us cautious about accepting at face value the life-long accusations against Vossius. Moreover, it points to the rather problematic nature of terms like 'libertinage' and atheism. Recently, it has been argued that Spinoza and Adriaan Koerbagh (1632–1669) were no atheists in the strict sense of the term – they both argued for the existence of a God, although not the traditional Christian

⁹ See Grafton, above, 83.

¹⁰ Israel, Radical Enlightenment; Idem., Enlightenment Contested.

¹¹ Israel, Radical Enlightenment, 451, 449.

¹² Jelles to Spinoza, 25 March 1667, Spinoza, Briefwisseling, 260.

Lord.¹³ Vossius' conception of God is also not clear. Pierre Des Maizeaux (1673–1745) later remarked 'Nobody has ever succeeded in persuading him to accept the truths of Christianity in their totality'.¹⁴ His close friend Hadrianus Beverlandus (1650–1716) reportedly noted that when the Dean of Windsor visited Vossius at his deathbed, he first refused to receive the sacrament, saying 'I'd rather have you explain to me how I can prevail upon my farmers to pay off their debts!'¹⁵ Again, the parallel with Christiaan Huygens is intriguing. When Huygens was on his deathbed in 1695, his elder brother Constantijn Junior (1628–1697) noted that '[he] said, the people would tear him to pieces if they heard his opinions of religion'. When the Huygens family tried to persuade Christiaan to let a minister come 'he started screaming and cursing'. Whatever Vossius was, he was certainly not the only keen mind of his age questioning traditional Christian conceptions and beliefs.

The case of Isaac Vossius also demonstrates that the history of scholarship and science involves much more than a close study of the genealogy, diffusion and reception of ideas. Vossius' launch of challenging editions, emendations and theories did not take place in a vacuum, but was deeply anchored in what we could call the material culture of scholarship. Vossius operated in a world in which notes, letters, books, libraries, instruments, virtual witnesses, drawings and diagrams played an increasingly important role in learned discourse. Vossius was well aware that the diffusion of ideas could benefit from their mode of presentation: a formal letter, a gift, a flattering dedication, a pleasing lay-out of a book, an author's copy of the book itself. This observation brings us to a rather important point. Given Isaac Vossius' pivotal role in the mid-seventeenth-century European world of learning, an inventory of his correspondence (now scattered all over Europe; the main collecting points being the Bodleian Library and the university libraries of Amsterdam and Leiden), as well as an edition, or at least images available via the internet, are a desideratum. The editions of contemporary correspondences such as those of Descartes, Huygens, Hartlib, Oldenburg, Spinoza and Leibniz demonstrate the importance of this kind of source. Moreover, as the contributions of Susan Derksen and Astrid Balsem to this volume show, a closer study of Isaac Vossius'

¹³ Wielema, 'Koerbagh'; Idem, *March of the Libertines*; Van Bunge, 'Introduction'.

¹⁴ Maizeaux, Vie de Mr De Saint Evremont, 214.

 $^{^{15}}$ Quoted by De Smet, 'Vossius, Isaac', 1050–1051. See also Wauters, 'Libertinage érudit and Isaac Vossius'.

 $^{^{16}}$ Journaal van Constantijn Huygens, den zoon III, 486; 497; 503–504. See also the accounts on Spinoza's death bed in Steenbakkers et al., 'Claudestine Notebook', 232–236.

library, the nucleus of which has been in Leiden since 1690, might reveal new insights into his thought-experiments, his opinion of his peers, and his network.

There is vet another aspect of material culture of relevance here, namely Vossius' sources of income. For a long time it has been taken for granted that the history of ideas takes place between brilliant minds over the ages, rather than between persons with their own particularities, who moreover needed to be housed, clothed and fed. In the wake of publications on the importance of material culture and self-fashioning, themes like patronage and protection have become relevant.¹⁷ Isaac Vossius is a case in point. As Balsem, Davids and Jorink show in the present volume, Vossius was constantly aware of the financial context (and potential consequences) of his scholarly pursuits. Reducing Vossius' intellectual development to the bottom line 'follow the money' would fail to do justice to his accomplishments, but, nevertheless, it is intriguing to note that Vossius was in the Netherlands when he was appointed by the States of Holland as their official historian; in France when Chapelain granted him in the name of Louis XIV a royal pension and Vossius dedicated *De Nili origine* to the king; left France when Christiaan Huygens was appointed instead of him as a (generously paid) member of the Académie Royale; was in England in 1664 when there was a vacancy for the position his father had once taken; and finally settled in the kingdom in 1670 with the prospect of an appointment as the Canon of Windsor. And would it be a coincidence that, from that time on, the focus of his research was less on topics favoured a decade before in the circles of the Royal Society and the French court, namely natural philosophy and geography, and more on what had been his core business before 1658, classical philology and the edition of texts?

So, finally, we are left with perhaps more questions than when we started our inquiries into the life and times of this idiosyncratic figure. As Grafton concludes in the present volume: 'in essence he remains an elusive being, a butterfly that no one can hope to pin to a single spot on the map of the Republic of Letters'.¹8 We do not even have a portrait of Vossius, to give us at least the illusion that we have come to grips with him.

¹⁷ See, for example, Biagioli, Galilei, Courtier; Steward, The Courtier and the Heretic.

¹⁸ Grafton, above, 74.

BIBLIOGRAPHY

- Aa, A.J. van der, 'Franciscus Nansius of Nans', in: Idem, *Biographisch woordenboek der Nederlanden*, vol. 13 (Haarlem 1868), 66.
- Accursius, B., ed., Historiae Romanae scriptores latini (Milan 1475).
- Adler, W., Time Immemorial: Archaic History and its Sources in Christian Chronography from Julius Africanus to George Syncellus (Washington, DC 1989).
- Adler, W. and P. Tuffin, eds, The Chronography of George Synkellos (Oxford 2002).
- Africanus, J., *Chronographiae: The Extant Fragments*, ed. M. Wallraff, with U. Roberto, and, for the oriental sources, K. Pinggéra; tr. W. Adler (Berlin 2007).
- Alberti, L.B., La pittura di Leon Battista Alberti, tr. L. Domenichi (Venice 1547).
- ----, On Painting, ed. and tr. J. Spencer (New Haven and London 1966).
- Alberti, R., 'Trattato della nobiltà della pittura (1585)' in: P. Barocchi, ed., *Scritti d'arte del Cinquecento* (Milan and Naples 1971–1977) I, 365–372.
- Allen, D.C., The Legend of Noah: Renaissance Rationalism in Art, Science, and Letters (Urbana, IL 1949; repr. 1963).
- ——, Mysteriously Meant: The Rediscovery of Pagan Symbolism and Allegorical Interpretation in the Renaissance (Baltimore 1970).
- d'Almeyda, M., História geral de Etiópia-a-Alta ou Preste Joam, e do que nelle obraram os Padres da Companhia de Jesus (Coimbra 1660).
- d'Anville, J.B., 'Dissertation sur les sources du Nil pour prouver qu'on ne les a point découvertes', Mémoires de littérature, tirés des registres de l'Académie Royale des Inscriptions et Belles Lettres 26 (1759) 46-63.
- Appendix Vergiliana, Publii Virgilii Maronis Appendix cum supplemento multorum antehac nunquam excusorum Poematum veterum poetarum. I. Scaligeri in eandem Appendicem commentarii et castigationes (Lyon 1572).
- Aristeae historia LXXII interpretum, [ed. Henry Aldrich] (Oxford 1692).
- Aristotle, On the Soul; Parva naturalia; On Breath, tr. W.S. Hett (London and Cambridge, MA 1957).
- Ashworth, W., 'Natural History and the Emblematic Worldview', in: D.C. Lindberg and R.S. Westman, eds, *Reappraisals of the Scientific Revolution* (Cambridge 1990) 303–323.
- AT: see Descartes, R.
- Ausonius, D., Opera in meliorem ordinem digesta. Recognita sunt a Iosepho Scaligero . . . Eiusdem Iosephi Scaligeri Ausonianarum lectionum libri duo (Lyon 1574–1575).
- Auvray, P., Richard Simon (1638–1712). Étude bio-bibliographique avec des textes inédits (Paris 1974).
- Baartman, N. et al., eds, Baronnen en kunstenaars; de geschiedenis van het landhuis Oud-Amelisweerd vanaf de Middeleeuwen tot heden (Utrecht 1993).
- Bachrach, A.G.H., 'The Role of the Huygens Family in Seventeenth-Century Dutch Culture', in: H.J.M. Bots et al., eds, *Studies on Christiaan Huygens. Invited Papers from the Symposium on the Life and Work of Christiaan Huygens at Amsterdam on 22–25 August 1979* (Lisse 1980) 27–52.
- Bacon, F., *The Advancement of Learning*, ed. M. Kiernan (Oxford 2000).
- Balsem, A.C., "Libri omissi" italiani del Cinquecento provenienti dalla Biblioteca di Isaac Vossius, ora nella Biblioteca della Rijksuniversiteit di Leida (Leiden 1994).
- ——, 'Books from the Library of Andreas Dudith (1533–89) in the Library of Isaac Vossius (1618–89)', in: R. Myers, M. Harris and G. Mandelbrote, eds, *Books on the Move. Tracking Copies through Collections and the Book Trade* (New Castle and London 2007) 69–86.
- —, "Oude saken, finantie raekende van Oom". Een brief van Isaac Vossius aan zijn neef Gerardus Joannes Vossius jr', in: P. Dystelberge and G. Verbrook, eds, 27/01/2008

[Huldebundel voor Piet Verkruijsse] (Amsterdam [2009]), 467–477. http://issuu.com/bookhistory/docs/piet203, digital pages 170–180.

Barnes, T., Constantine and Eusebius (Cambridge, MA and London 1981).

Barocchi, P., ed., Trattati d'arte del Cinquecento (Bari 1960).

Baronio, C., Annales ecclesiastici, vol. I (Antwerp 1597).

Barret-Kriegel, B., Jean Mabillon (Paris 1988).

Beda, V., Opera de temporibus, ed. Ch.W. Jones (Cambridge, MA 1943).

Bellarmine, R., De scriptoribus ecclesiasticis (Cologne 1613).

Benjamins, H.S., 'Noah, the Ark, and the Flood in Early Christian Theology: The Ship of the Church in the Making', in: F. García Martínez and G.P. Luttikhuizen, eds, *Interpretations of the Flood* (Leiden 1998) 134–149.

Berkel, K. van, Isaac Beeckman (1588–1637) en de mechanisering van het wereldbeeld (Amsterdam 1983).

—, 'The Dutch Republic. Laboratory of the Scientific Revolution', in: K. van Berkel and L. de Goei, eds, *The International Relevance of Dutch History*. Special Issue *Bijdragen en Mededelingen betreffende de Geschiedenis der Nederlanden* 125 (2010) 81–106.

Berkel, K. van, A. van Helden and L. Palm, eds, A History of Science in the Netherlands: Survey, Theme and Reference (Leiden 1999).

Berkvens-Stevelinck, C., Magna Commoditas. Geschiedenis van de Leidse universiteitsbibliotheek, 1575–2000 (Leiden 2001).

Bernays, J., Joseph Justus Scaliger (Berlin 1855).

Bernus, A., Richard Simon et son Histoire critique du Vieux Testament (Lausanne 1869; reprinted Geneva 1969).

Biagioli, M., Galileo, Courtier: the Practice of Science in the Culture of Absolutism (Chicago 1993).

Bibliander, Th., *Temporum a condito mundo usque ad ultimam ipsius aetatem supputatio partitioque exactior* (Basel 1558).

Biondo, M., Della nobilissima pittura (Venice 1549).

Birch, T., The History of the Royal Society of London (London 1756–1757).

Black, C.F., The Italian Inquisition (New Haven 2009).

Blaeu, J., Grooten atlas, oft werelt-beschrijving, in welcke't aertryck, de zee, en hemel, wordt vertoond en beschreven (Amsterdam 1646–1665).

Blair, A., The Theatre of Nature. Jean Bodin and Renaissance Science (Princeton 1997).

Blok, F.F., Contributions to the History of Isaac Vossius's Library (Amsterdam and London 1974).

-----, 'Isaac Vossius and the Blaeus', 2 parts, Quaerendo 26 (1996) 77-84; 87-93.

—, Isaac Vossius en zijn kring. Zijn leven tot zijn afscheid van Koningin Christina van Zweden 1618–1655 (Groningen 1999).

——, Isaac Vossius and his Circle. His Life until his Farewell to Queen Christina of Sweden 1618–1655, tr. C. van Heertum (Groningen 2000).

—, 'Verdwaalde papieren van de familie Vossius uit de zeventiende eeuw', *Lias* 30 (2003) 50–107.

Blok, F.F., and C.S.M. Rademaker, 'Isaac Vossius's Grand Tour, 1641–1644. The Correspondence between Isaac and His Parents', *Lias* 33 (2006) 150–216; *Lias* 35 (2008) 209–280; *Lias* 36 (2009) 294–386.

Blussé, L., 'Doctor at Sea; Chou Mei-Yeh's Voyage to the West (1710–1711)', in: E. de Poorter ed., As the Twig is Bent...; Essays in Honour of Frits Vos (Amsterdam 1990) 7–30.

Boas Hall, M., Henry Oldenburg. Shaping the Royal Society (Oxford 2002).

Bod, R., De vergeten wetenschappen: een geschiedenis van de humaniora (Amsterdam 2010).

Bod, R., J. Maat and T. Weststeijn, eds, *The Making of the Humanities*. I: Early Modern Europe (Amsterdam 2010).

—, eds, The Making of the Humanities. II: From Early Modern to Modern Disciplines (Amsterdam, forthcoming 2012).

Boeren, P.C., Codices Vossiani chymici (Leiden 1975).

- Bold, J., 'John Webb; Composite Capitals and the Chinese Language', *The Oxford Art Journal* 4 (1981) 9–17.
- [Borrichius, O.], Olai Borrichii Itinerarium 1660–1665, ed. H. Schepelern, 4 vols (Copenhagen 1983).
- Bos, E.-J., and Theo Verbeek, 'Conceiving the Invisible. The Role of Observation and Experiment in Descartes's Correspondence, 1630–1650', in: D. van Miert, ed., Communicating Observations in Early Modern Letters, 1500–1670. Epistolography and Epistemology in Science and Scholarship (London, forthcoming).
- Boxel, P. van, Rabbijnenbijbel en Contrareformatie (Hilversum 1983).
- ——, 'Robert Bellarmine, Christian Hebraist and Censor', in: C.R. Ligota and J.-L. Quantin, eds, *History of Scholarship* (Oxford 2006) 250–275.
- Bredvold, L.I., The Intellectual Milieu of John Dryden (Ann Arbor 1934).
- Brincken, A.-D. von den, 'Beobachtungen zum Aufkommen der retrospektiven Inkarnationsära', Archiv für Diplomatik 25 (1979) 1–20.
- Brodley, L., et al., Prince Rupert's Drops', Notes and Records of the Royal Society of London 41 (1986) 1– 26.
- Brown, H., Scientific Organizations in Seventeenth-Century France (Baltimore 1934).
- Bruin, C.C. de, De Statenbijbel en zijn voorgangers, ed. F.G.M. Broeyer (Haarlem 1993).
- Le Brun, J. and G.G. Stroumsa, eds, Les Juifs présentés aux Chrétiens. Textes de Léon de Modène et de Richard Simon (Paris 1998).
- Bruyn, J. de, Epistola ad clariss. virum D.D. Isaacum Vossium, ubi iudicium fertur super ipsius libro De natura et proprietate lucis, et simul Cartesii doctrina defenditur (Amsterdam 1663).
- Buitenwerf, R., Book III of the Sibylline Oracles and its Social Setting (Leiden and Boston 2003).
- De Bujanda, J.M., *Index librorum prohibitorum* 1600–1966 (Montreal 2002).
- Bunge, W. van, From Stevin to Spinoza. An Essay on Philosophy in the Seventeenth-Century Dutch Republic (Leiden 2001).
- et al., eds, The Dictionary of Seventeenth and Eighteenth-Century Dutch Philosophers (Bristol 2003).
- —, ed., The Early Enlightenment in the Dutch Republic, 1650–1750. Selected Papers of a Conference held at the Herzog August Bibliothek, Wolfenbüttel 22–23 March 2001 (Leiden 2003).
- —, 'Introduction', in: A. Koerbagh, *A Light Shining in Dark Places, to Illuminate the Main Questions of Theology and Religion*, ed. and tr. M. Wielema (Leiden and Boston 2011)
- Burmannus, P., ed., Sylloges Epistolarum a viris illustribus scriptarum tomi quinque, collecti et digesti per Petrum Burmannum, 5 vols (Leiden 1727).
- Burnett, S., From Christian Hebraism to Jewish Studies: Johannes Buxtorf (1564–1629) and Hebrew Learning in the Seventeenth Century (Leiden and Boston 1996).
- Burstyn, H.J., 'Theories of Winds and Ocean Currents from the Discoveries to the End of the Seventeenth Century', *Terrae Incognitae. The Annals of the Society for the History of Discoveries* 3 (1971) 7–31.
- Callmer, C., ed., Catalogus codicum manu scriptorum Bibliothecae Regiae Holmiensis c. annum MDCL ductu et auspicio Isaac Vossii conscriptus (Stockholm 1971).
- Campen, J. van, De Haagse jurist Jan Theodore Royer (1737–1807) en zijn verzameling Chinese voorwerpen (Hilversum 2000).
- Cappel, L., Chronologia sacra a condito mundo . . . ad ultimam Iudaeorum per Romanos captivitatem deducta (Paris 1655).
- —, Commentarii et notae criticae in Vetus Testamentum (Amsterdam 1689).
- Carley, J., ed., The Libraries of King Henry VIII (London 2000).
- Casaubon, I., De satyrica Graecorum poesi et Romanorum satira libri duo. In quibus etiam poetae recensentur, qui in utraque poesi floruerunt (Paris 1605).
- —, De rebus sacris et ecclesiasticis exercitationes XVI (Frankfurt 1615; first edition: London 1614).

- ——, De rebus sacris et ecclesiasticis exercitationes XVI (Geneva 1654).
- —, Epistolae, insertis ad easdem responsionibus, quotquot hactenus reperiri potuerunt, secundum seriem temporis accurate digestae. Accedunt huic tertiae editioni, praeter trecentas ineditas epistolas, I. Casauboni vita, eiusdem dedicationes, praefationes, prolegomena, poemata, fragmentum de libertate ecclesiastica. Item, Merici Casauboni, I. F. epistolae, dedicationes, praefationes, prolegomena, et tractatus quidam rariores. Curante Theodoro Ianson ab Almeloveen (Rotterdam 1709).
- Catalogus variorum et exquisitissimorum librorum Gerardi Ioannis Vossii. Quorum auctio habebitur in aedibus Petri Leffen, bibliopolae sub signo Phoenicis. [Die Mercurii 4 Octobris] Anno 1656 (Leiden 1656).
- Catalogus librorum illustrium, quorum auctio habebitur Lugduni in Batavis in aedibus Petri Leffen Sub Signo Phaenicis. Ultimo Novembris Anni 1666. hora nona matutina (Leiden 1666).
- [Catullus], Catulli, Tibulli, Propertii nova editio. Iosephus Scaliger...recensuit. Eiusdem in eosdem Castigationum liber (Paris 1577).
- Catullus, Caius Valerius Catullus et in eum Isaaci Vossii observationes (London 1684).
- Chajim, J. ben, Introduction to the Rabbinic Bible and the Massoreth ha-Massoreth of Elias Levita (New York 1968).
- Chambre, M.C. de la, Discours sur les causes du desbordement du Nil (Paris 1665).
- Champion, J., 'Père Richard Simon and English Biblical Criticism, 1680–1700', in: J.E. Force and D.S. Katz, eds, *Everything Connects: In Conference with Richard H. Popkin* (Leiden and Boston 1999) 39–61.
- ——, 'Acceptable to Inquisitive Men: some Simonian Contexts for Newton's Biblical Criticism, 1680–1692', in: J.E. Force and R.H. Popkin, eds, *Newton and Religion* (Dordrecht, Boston and London 1999) 77–96.
- Chang, S.-C., Natur und Landschaft; Der Einfluß Athanasius Kirchers 'China Illustrata' auf die europäische Kunst (Berlin 2003).
- [Chapelain, J.], Lettres de Jean Chapelain, ed. J.P. Tamizey de Larroque, 2 vols (Paris 1880–1883).
- —, Les lettres authentiques à Nicolas Heinsius (1649–1672). Une amitié érudite entre France et Hollande, ed. B. Bray (Paris 2005).
- Chaufepié, J.-G. de, Nouveau dictionnaire historique et critique pour servir de supplément au Dictionnaire historique et critique de M. Pierre Bayle, 4 vols (Amsterdam 1750–1756).
- CHO: see [Oldenburg, H.].
- Clarke, D., Occult Powers and Hypotheses: Cartesian Natural Philosophy under Louis XIV (Oxford 1989).
- Cocceius, J., Iudaicarum responsionum et quaestionum consideratio (Leiden 1662).
- Cohen, H.F., 'Open and Wide, yet without Heights or Depth', Traxtrix. Yearbook for the History of Science, Medicine, Technology and Mathematics 2 (1990) 159-165.
- ——, The Scientific Revolution. A Historiographical Inquiry (Chicago 1994).
- ----, Christiaan Huygens en de Wetenschapsrevolutie van de 17de eeuw (Leiden 1996).
- Collani, C. von, Die Figuristen der Chinamission (Frankfurt am Main 1981).
- ——, 'Theologie und Chronologie in Martinis Sinicae Historiae Decas Prima (1658)', in: R. Malek and A. Zingerle, eds, Martino Martini S.J. (1614–1661) und die Chinamission im 17. Jahrhundert (Sankt Augustin 2000) 146–183.
- Colomiès, P., Opuscula (Utrecht 1669).
- —, Opera theologici, critici et historici argumenti... Catalogus M[anu]s[crip]torum codicum Isaaci Vossii, ed. J.A. Fabricius (Hamburg 1709).
- Comenius, J.A., *The Way of Light* (Amsterdam 1668), tr. E.T. Campagnac (Liverpool and London 1938).
- Commager, H.S., The Empire of Reason (Garden City, N.Y. 1977).
- Cook., H.J., Matters of Exchange. Commerce, Medicine, and Science in the Dutch Golden Age (New Haven 2007).
- Cornelius, P., Languages in Seventeenth- and Eighteenth-Century Imaginary Voyages (Geneva 1965).

- Corvisier, J.-N., 'L'état présent de la démographie historique antique: Tentative de bilan', *Annales de démographie historique* (2001) 101–140.
- Cram, D. and J. Maat, eds, George Dalgarno on Universal Language (Oxford 2001).
- Crenius, T., Animadversiones philologicae et historicae, novas librorum editiones, praefationes, indices, nonnullasque summorum aliquot virorum labeculas notatas, excutientes, 19 vols (Rotterdam, part 1; Leiden (part 2–7 and 11–19), Amsterdam (part 8–10) 1695–1720).
- Curran, B., The Egyptian Renaissance; The Afterlife of Egypt in Renaissance Italy (Chicago 2007).
- Daire, E., Économistes financiers du XVIII^e siècle. Vauban: Projet d'une dîme royale. Boisguillebert: Détail de la France. Factum de la France et opuscules divers. Jean Law: Considérations sur le numéraire et le commerce... opuscules divers. Melon: Essai politique sur le commerce. Dutot: Réflexions politiques sur le commerce et les finances... Commentaires et notes... par M. Eugène (Paris 1843).
- Dale, A. Van, De oraculis ethnicorum dissertationes duae (Amsterdam 1683).
- —, Dissertatio super Aristea de LXX interpretibus (Amsterdam 1705).
- Danneberg, L., 'Ezechiel Spanheim's Dispute with Richard Simon: On the Biblical Philology at the End of the 17th Century', in: S. Pott, M. Mulsow and L. Danneberg, eds, *The Berlin Refuge*, 1680–1780: Learning and Science in European Context (Leiden and Boston 2003) 49–88.
- Dapper, O., Gedenkwaerdig bedryf der Nederlandsche Oost-Indische Maetschappye op de kuste en in het keizerrijk van Taising of Sina: behelzende het tweede gezandschap...en het derde gezandschap...beneffens een beschryving van geheel Sina (Amsterdam 1670).
- —, Atlas Chinensis... Englished by John Ogilby (London 1671).
- Darlow, T.H. and H.F. Moule, eds, *Historical Catalogue of the Printed Editions of Holy Scripture in the Library of the British and Foreign Bible Society, vol. II Polyglots and Languages Other than English* (New York 1963).
- Daston, L. and K. Park, Wonders and the Order of Nature, 1150-1750 (New York 1998).
- Davids, K., Zeewezen en wetenschap: de wetenschap en de ontwikkeling van de navigatietechniek in Nederland tussen 1585 en 1815 (Amsterdam 1986).
- —, 'De wijde horizon van een kamergeleerde: Isaac Vossius (1618–1689) en de zeevaart', in: P. Hoftijzer and T. Verbeek, eds, *Leven na Descartes. Zeven opstellen over ideeëngeschiedenis in Nederland in de tweede helft van de zeventiende eeuw* (Hilversum 2005) 27–38.
- ——, The Rise and Decline of Dutch Technological Leadership. Technology, Economy and Culture in the Netherlands, 1350–1800 (Leiden 2008).
- ——, 'Humanism and water management: Scaliger's Discours de la jonction des mers', Lias $37\ (2010)\ 1-22$.
- Davis, M., The Universal Computer; The Road from Leibniz to Turing (New York 2000).
- Deacon, M., 'Introduction', in: I. Vossius, A Treatise Concerning the Motion of the Seas and the Winds (London 1677) facsimile ed. M. Deacon (New York 1993) 9-24.
- Delatour, J., 'Pour une édition critique des Scaligerana', *Bibliothèque de l'école des Chartes* 156 (1998) 407–450.
- Descartes, R., Oeuvres, eds C. Adam and P. Tannery, 11 vols (Paris 1897-1913).
- Detienne, M., Comparer l'incomparable (Paris 2000).
- ——, 'L'art de construire des comparables. Entre historiens et anthropologues', *Critique internationale* 14 (2002) 68–78.
- Deursen, A.Th. van, *Plain Lives in a Golden Age: Popular Culture, Religion, and Society in Seventeenth-Century Holland*, tr. M. Ultee (Cambridge 1991).
- Dew, N., 'Reading Travels in the Culture of Curiosity: Thévenot's Collection of Voyages', *Journal of Early Modern History* 10 (2006) 39–59.
- —, Orientalism in Louis XIV's France (Oxford 2009).
- Dibbets, G.R.W., ed., Predikant en toerist. Het dagboek van Joannes Vollenhove, Engeland, 17 mei-30 oktober 1674 (Hilversum 2001).

- Dibon, P. and F. Waquet, *Johannes Fredericus Gronovius*. Pélerin de la République des Lettres (Genève 1984).
- Dicaearchus, Geographica quaedam, sive de vita Graeciae...cum Lat. interpretatione atque anot. Henr. Stephani ([Geneva] 1589).
- Diderot, D., Encyclopédie, 35 vols (Paris 1751-1780).
- Dijksterhuis, E.J., The Mechanization of the World Picture (Oxford 1969).
- Dijksterhuis, F.J., Lenses and Waves. Christiaan Huygens and the Mathematical Science of Optics in the Seventeenth Century (Dordrecht 2004).
- —, "Will the Eye be the Sole Judge?" 'Science' and 'Art' in the Optical Inquiries of Lambert ten Kate and Hendrik van Limborch around 1710', in: E. Jorink and B. Ramakers, eds, Art and Science in the Early Modern Netherlands (=Netherlands Yearbook for History of Art/Nederlands Kunsthistorisch Jaarboek 61) (Zwolle 2011) 308–331.
- ——, 'The Mutual Making of Sciences and Humanities. Willebrord Snellius, Jacob Golius, and the Early Modern Entanglement of Mathematics and Philology', in: R. Bod., J. Maat and T. Westeijn, eds, *The Making of the Humanities*. II: *From Early Modern to Modern Disciplines* (Amsterdam, forthcoming 2012).
- Dodwell, H., A Discourse concerning Sanchoniathon's Phoenician History (London 1681).
- Doedes, J.I., 'Vijf drukken van Is. de la Peyrère's Praeadamitae, uit het jaar 1655', in: W. Moll and J.G. de Hoop Scheffer, eds, *Studiën en Bijdragen op 't gebied der historische theologie,* (Amsterdam 1880) 238–242.
- Doucette, L.E., Emery Bigot. Seventeenth-Century French Humanist (Toronto 1970).
- Ducreux, M.-E., 'Les premiers essais d'évaluation de la population mondiale et l'idee de dépopulation au XVII^e siècle', *Annales de Démographie Historique* (Paris etc. 1977) 421–438.
- Dupâquier, J., 'Londres ou Paris? Un grand débat dans le petit monde des arithméticiens politiques (1662–1759)', *Population* 53.1–2 (1998) 311–325.
- Dupré, S. and C. Lüthy, eds, Silent Messengers: The World of Goods and the Circulation of Knowledge in the Early Modern Netherlands (Berlin 2011).
- Duyvendak, J.J.L., 'Early Chinese Studies in Holland', *T'oung Pao*, ser. 2, 32 (1936) 293–344. Eden, K., *Hermeneutics and the Rhetorical Tradition: Chapters in the Ancient Legacy and its Humanist Reception* (New Haven 1997).
- Eeghen, I.H. van, *De Amsterdamse boekhandel 1680–1725*, 5 parts in 6 vols (Amsterdam 1960–1978).
- Egmond, F., and P. Mason, *The Mammoth and the Mouse: Microhistory and Morphology* (Baltimore and London 1997).
- Emmens, J.A., Rembrandt en de regels van de kunst (Amsterdam 1979).
- Emmius, U., Opus chronologicum novum, pluribus partibus constans, elaboratum et concinnatum ab Ubbone Emmio Frisio Grethano, Historiarum ac Graecae linguae Professore in Academia Groningana (Groningen 1619).
- Erasmus, H.J., The Origins of Rome in Historiography from Petrarch to Perizonius (Assen 1962).
- Everts, M., 'Die "Orakel" von Antonius van Dale (1638–1708): Eine Streitschrift', *Lias* 8 (1981) 225–267.
- Feingold, M., 'Huygens and the Royal Society', De zeventiende eeuw 12 (1996) 22-36.
- Feldman, L., Josephus's Interpretation of the Bible (Berkeley 1998).
- Feldman, L., and G. Hata, eds, Josephus, Judaism and Christianity (Detroit 1987).
- Ferreri, L., La questione omerica dal Cinquecento al Settecento (Rome 2007).
- Findlen, P., Possessing Nature. Museums, Collecting, and Scientific Culture in Early Modern Italy (Berkeley 1994).
- ——, 'Un incontro con Kircher a Roma', in: E. lo Sardo, ed., *Athanasius Kicher; il museo del mondo*, cat. exh. Rome, Palazzo Venezia (Rome 2001) 39–47.
- ——, ed., Athanasius Kircher. The Last Man Who Knew Everything (New York and London 2004).

- ——, 'The Last Man who knew Everything . . . or did He? Athanasius Kircher (1602–1680)', in: Eadem, ed., *Athanasius Kircher. The Last Man Who Knew Everything* (New York and London 2004) 1–48.
- Finegan, J., Handbook of Biblical Chronology (Princeton 1964; rev. ed., Peabody, MA 1998).
- Fletcher, J., ed., Athanasius Kircher und seine Beziehungen zum gelehrten Europa seiner Zeit (Wiesbaden 1988).
- Fleyfel, A., 'Richard Simon, critique de la sacralité biblique', Revue d'histoire et de philosophie religieuses 88 (2008) 469–492.
- Fontenelle, B. Le Bovier de, Histoire des oracles (Paris 1686).
- Forbes, E.G., L. Murdin and F. Willmoth, eds, *The Correspondence of John Flamsteed, the First Astronomer Royal*, 3 vols (Bristol 1995–2002).
- Forster, J., Dictionarium hebraicum novum, non ex Rabinorum commentis, nec nostratium doctorum stulta imitatione descriptum, sed ex ipsis thesauris sacrorum Bibliorum et eorundem accurata locorum collatione depromptum, cum phrasibus scripturae Veteris et Novi Testamenti diligenter annotatis (Basel 1557).
- Fragnito, G., La Bibbia al rogo. La censura ecclesiastica e i volgarizzamenti della Scrittura (1471–1605) (Bologna 1997).
- —, ed., Church, Censorship and Culture in Early Modern Italy (Cambridge 2001).
- —, 'Per una geografia delle traduzioni bibliche nell'Europa cattolica (sedicesimo e dicia[s]settesimo secolo)', in: J.-L. Quantin and J.-C. Wacquet, eds, *Papes, princes et savants dans l'Europe moderne. Mélanges à la mémoire de Bruno Neveu* (Geneva 2007) 51–77.
- Fréville, H., 'Richard Simon et les protestants d'après sa correspondance', Revue d'histoire moderne 6 (1931) 30-55.
- Gaastra, F., Bewind en beleid bij de VOC 1672-1702 (Zutphen 1989).
- Gaisser, J.H., Pierio Valeriano on the Ill Fortune of Learned Men: A Renaissance Humanist and his World (Ann Arbor 1999).
- [Gale, T., ed.], Psalterium, juxta exemplar Alexandrinum (Oxford 1678).
- [Galileo, G.], Le Opere di Galileo Galilei, edizione nazionale (Florence 1890–1909).
- Garbitius, M., ed. and tr., Aristeae, de legis divinae ex Hebraica lingua in Graecam translatione, per Septuaginta interpretes...historia, nunc primum Graece edita (Basel 1561).
- Gelder, E. van, Tussen Hof en Keizerskroon. Carolus Clusius en de ontwikkeling van de botanie aan Midden-Europese hoven (1573–1593) (Leiden 2011).
- Germain, Dom M., Lettres d'Italie (1685–1686), ed. J.P. McDonald (Florence 1992).
- Gibbon, E., The History of the Decline and Fall of the Roman Empire, 2nd ed. (London 1846).
- Gingerich, O., An Annotated Census of Copernicus' De Revolutionibus (Nuremberg, 1543 and Basel, 1566) (Leiden and Boston 2002).
- Gliozzi, G., Adamo e il nuovo mondo (Florence 1977).
- Godman, P., The Saint as Censor: Robert Bellarmine between Inquisition and Index (Leiden 2000).
- ——, Die geheime Inquisition (Munich 2001).
- Goeree, W., Inleyding tot de practijck der algemeene schilderkonst (Middelburg 1697, first ed. 1670).
- Goethe, J.W.G., Farbenlehre (Stuttgart 1979; 20037).
- Goldgar, A., Impolite Learning. Conduct and Community in the Republic of Letters, 1680–1750 (New Haven 1995).
- , Tulipmania: Money, honor, and knowledge in the Dutch Golden Age (Chicago 2007).
- Graevius, J.G., Thesaurus antiquitatum Romanarum: in quo continentur lectissimi quique scriptores, qui superiori aut nostro seculo Romanae reipublicae rationem, disciplinam, leges, instituta, sacra, artesque togatas ac sagatas explicarunt et illustrarunt, congestus a Ioanne Georgio Graevio; Accesserunt variae et accuratae tabulae aeneae, 12 vols (Utrecht and Leiden 1694[1699]).

- Grafton, A., 'Joseph Scaliger and Historical Chronology: The Rise and Fall of a Discipline', History and Theory 14 (1975) 156–185.
- —, Joseph Scaliger. A Study in the History of Classical Scholarship, 2 vols (Oxford 1983–1993).
- ——, 'Protestant versus Prophet: Isaac Casaubon on Hermes Trismegistus', *Journal of the Warburg and Courtauld Institutes* 46 (1983) 78–93.
- —, Forgers and Critics. Creativity and Duplicity in Western Scholarship (London 1990).
- ——, Defenders of the Text. The Tradition of Scholarship in an Age of Science, 1450–1800 (Cambridge, MA 1991).
- ——, New Worlds, Ancient Texts. The Power of Tradition and the Shock of Discovery (Cambridge, MA 1992).
- —, Athenae Batavae: The Research Imperative at Leiden, 1575–1650 (Leiden 2003).
- ——, 'Kircher's Chronology', in: P. Findlen, ed., *Athanasius Kircher: The Last Man Who Knew Everything* (New York and London 2004) 171–189.
- ——, Worlds Made by Words. Scholarship and Community in the Modern West (Cambridge, MA 2009).
- Grafton. A. and H.J. de Jonge, Joseph Scaliger. A Bibliography 1850–1993, in: R. Smitskamp, ed., The Scaliger Collection. A Collection of over 200 Antiquarian Books by and about Josephus Justus Scaliger, with Full Descriptions With a Checklist of all Known Scaliger Publications With a Checklist of the Scaliger annotati With a Full Index to Bernays' Scaliger Biography (1855). Preface by Alastair Hamilton (Leiden 1993).
- Grafton, A. and J. Weinberg, Thave always loved the Holy Tongue'. Isaac Casaubon, the Jews, and a Forgotten Chapter in Renaissance Scholarship (Cambridge, MA 2011).
- Grafton, A. and M. Williams, *Christianity and the Transformation of the Book: Origen, Eusebius and the Library of Caesarea* (Cambridge, MA and London 2006).
- Grafton, A. and N. Swerdlow, 'Technical Chronology and Astrological History in Varro, Censorinus and Others', *Classical Quarterly* 35 (1985) 454–465.
- ——, 'Greek Chronography in Roman Epic: The Calendrical Date of the Fall of Troy in the *Aeneid'*, Classical Quarterly 36 (1986) 212–218.
- Graindorge, A., De natura ignis, lucis, et colorum dissertatio (Caen 1664).
- Grendler, P.F., The Roman Inquisition and the Venetian Press, 1540–1605 (Princeton 1977).
- Grootendorst A., ed., Jan de Witt's elementa curvarum linearum (London 2000).
- Grotius, H., Dissertatio altera de origine gentium Americanarum adversus obtrectatorem, (Paris 1643).
- -----, Briefwisseling, vol. 6, ed. B.L. Meulenbroek (The Hague 1967).
- Gruppe, O., Geschichte der klassischen Mythologie und Religionsgeschichte (Leipzig 1921).
- Gudius, M., Marquardi Gudii et doctorum virorum ad eum epistolae: quibus accedunt ex Bibliotheca Gudiana clarissimorum et doctissimorum virorum qui superiore, et nostro saeculo floruerunt, et Claudii Sarravii epistolae ex eadem Bibliotheca auctiores, curante Petro Burmanno (Utrecht 1697).
- Guyot-Desfontaines, P.F., Le Nouveau Gulliver ou Voyages de Jean Gulliver fils du capitain Gulliver (Paris 1730).
- Haakman, A., De onderaardse wereld van Athanasius Kircher (Amsterdam 1991).
- Haegse mercurius no. 97 (9 July 1698) and no. 103 (30 July 1698).
- Häfner, R., Götter im Exil: Frühneuzeitliches Dichtungsverständnis im Spannungsfeld christlicher Apologetik und philologischer Kritik (ca. 1590–1736) (Tübingen 2003).
- Halley, E., 'An Historical Account of the Trade Winds, and Monsoons, observable in the Seas between and near the Tropics, with an Attempt to assign the Phisical Cause of the Said Winds', *Philosophical Transactions of the Royal Society* 16 (1686) 153–168.
- Harbsmeier, C., 'John Webb and the Early History of the Study of the Classical Chinese Language in the West', in: M. Wilson and J. Cayley, eds., *Europe Studies China: Papers from an International Conference on the History of European Sinology* (London 1995) 297–338.

- Harris, S.J., 'Mapping Jesuit Science. The Role of Travel in the Geography of Knowledge', in: J. O'Malley et al., eds, *The Jesuits, Cultures, Sciences and the Arts, 1540–1773* (Toronto 1999) 212–240.
- Hart, A.T., William Lloyd 1627–1717. Bishop, Politician, Author and Prophet (London 1952). Harth, P., Contexts of Dryden's Thought (Chicago 1968).
- Harwood, J.T., 'Rhetoric and Graphic in *Micrographia*', in: M. Hunter and S. Schaffer, eds, *Robert Hooke: New Studies* (Woodbridge 1989) 119–147.
- Hasse, E., Einführung in die Literatur des Refuge: der Beitrag der französischen Protestanten zur Entwicklung analytischer Denkformen am Ende des 17. Jahrhunderts (Berlin 1959).
- Hatch, R.A., 'Coherence, Correspondence & Choice: Gassendi & Boulliau on Light & Vision', in: Quadricentenaire de la naissance de Pierre Gassendi. 1592–1992: Actes du Colloque International Pierre Gassendi, Digne-les-Bains, 18–21 Mai 1992 (Digne-les-Bains 1994) II 365–385.
- Hattendorf, J., ed., *The Oxford Encyclopedia of Maritime History* (Oxford and New York 2007).
- Haugen, K., Richard Bentley: Poetry and Enlightenment (Cambridge, MA 2011).
- Hawkins, R.L., 'The Friendship of Joseph Scaliger and François Vertunien', *Romanic Review* 8 (1917) 117–44, 307–327.
- Hentschel, K. 'Das Brechungsgesetz in der Fassung von Snellius', Archive for History of Exact Sciences 55 (2001) 297–344.
- Hodgen, M.T., Early Anthropology in the 16th and 17th Centuries (Philadelphia 1964).
- Hody, H., Contra historiam Aristeae de LXX interpretibus (Oxford 1684; reprinted Oxford and London 1685).
- —, De Bibliorum textibus originalibus versionibus Graecis, & Latina Vulgata libri IV (Oxford 1705).
- ——, De Graecis illustribus linguae Graecae literarumque humaniorum instauratoribus, eorum vitis, scriptis, et elogiis libri duo, ed. S. Jebb (London 1742).
- Hoeschelius, D., ed., Geographica Marciani Heracleotae, Scylacis Caryandensis, Artemidori Ephesii, Dicaearchi Messenii, Isidori Characeni, omnia nunc primum, praeter Dicaearchi illa (Augsburg 1600).
- Hoftijzer, P.G., ed., Adelaar in de wolken: De Leidse jaren van Josephus Justus Scaliger 1593–1609 (Leiden 2005).
- Hofmann, F.L., 'Ueber einen merkwürdigen Auctionskatalog vom Jahre 1666', Serapeum. Zeitschrift für Bibliothekwissenschaft, Handschriftenkunde und ältere Litteratur IX no. 11 (1848) 161–162.
- Hoogstraten, S. van, *Inleyding tot de hooge schoole der schilderkonst; anders de zichtbaere werelt* (Rotterdam 1678).
- [Hooke, R.], *The Diary of Robert Hooke 1672–1680*, eds H. Robinson and W. Adams (London 1935).
- Höpfl, H., Beiträge zur Geschichte der Sixto-Klementinischen Vulgata (Freiburg im Bresgau
- Horbury, W., 'The Septuagint in Cambridge', in: N. de Lange, J.G. Krivoruchko and C. Boyd-Taylor, eds, *Jewish Reception of Greek Bible Versions. Studies in their Use in Late Antiquity and the Middle Ages* (Tübingen 2009) 9–38.
- Hornius, G., De originibus Americanis libri quatuor (Leiden 1652).
- —, Historiae philosophicae libri VII (Leiden 1655).
- —, Dissertatio de vera aetate mundi, qua sententia illorum refellitur qui statuunt Natale Mundi tempus annis minimum 1440 vulgarem aeram anticipare (Leiden 1659).
- ——, Defensio dissertationis de vera aetate mundi contra castigationes Isaaci Vossii (Leiden 1659).
- ——, Auctarium defensionis pro vera aetate mundi (Leiden 1659).
- ——, Kerckelycke historie, van de scheppinge des werelts, tot 't jaer des Heeren 1666 (Amsterdam 1683).

- Horst, D.J.H. ter, Isaac Vossius en Salmasius. Een episode uit de 17^{de}-eeuwsche geleerdengeschiedenis (The Hague 1938).
- Hsia, F., 'Jesuits, Jupiter's Satellites and the Académie Royale des Sciences', in: C.D. O'Malley et al., eds, *The Jesuits: Cultures, Sciences and the Arts, 1540–1773* (Toronto 1999) 241–257.
- ——, 'Athanasius Kircher's *China illustrata* (1667): An apologia pro vita sua', in: P. Findlen ed., *Athanasius Kircher: The Last Man Who Knew Everything* (New York and London 2004) 383–404.
- Huet, P.-D., Origenis in sacras scripturas commentaria quaecunque Graece reperiri potuerunt, 2 vols (Rouen 1668).
- Hulshoff Pol, E., 'Een Leids bibliothecaris: Abraham Gronovius', *Het boek* 35 (1962) 91–120. Hulsius, A., *Authentia absoluta s. textus Hebraei vindicata* (Rotterdam 1662).
- [Hume, D.], The Philosophical Works of David Hume, Including all the Essays and Exhibiting the More Important Alterations and Corrections in the Successive Editions Published by the Author (Edinburgh 1826).
- ——, The Letters of David Hume, ed. J.Y.T. Greig, 2 vols (Oxford 1932).
- Hunter, M., Establishing the New Science. The Experience of the Early Royal Society (Wood-bridge 1989).
- ——, Robert Boyle, Narcissus Marsh and the Anglo-Irish Intellectual Scene in the Late Seventeenth Century', in: M. McCarthy and A. Simmons, eds, *The Making of Marsh's Library. Learning, Politics and Religion in Ireland, 1650–1750* (Dublin 2004) 51–75.
- ——, Robert Boyle: Between God and Science (New Haven 2009).
- Hutton, J., The Greek Anthology in France and in the Latin Writers of the Netherlands to the Year 1800 (Ithaca and New York 1946).
- [Huygens, Christiaan], *Oeuvres Complètes de Christiaan Huygens*, 22 vols (The Hague 1888–1950).
- Huygens, Constantijn, Journaal van Constantijn Huygens, den zoon, van 21 October 1688 tot 2 Sept. 1696, 3 vols (Utrecht 1876–1888).
- Israel, J.I., The Dutch Republic. Its Rise, Greatness, and Fall 1477–1806 (Oxford 1995).
- —, Radical Enlightenment. Philosophy and the Making of Modernity 1650–1750 (Oxford 2001).
- ——, Enlightenment Contested: Philosophy, Modernity, and the Emancipation of Man, 1670–1752 (Oxford 2006).
- ——, 'Admiration of China and Classical Chinese Thought in the Radical Enlightenment (1685–1740)', *Taiwan Journal of East Asian Studies* 4/1/7 (2007) 1–25.
- Israel, M. ben, Piedra gloriosa o de la estatua de Nebuchadnesar (Amsterdam 1655).
- Iversen, E., The Myth of Egypt and Its Hieroglyphs (Copenhagen 1961).
- Jöcher, C.G., Allgemeines Gelehrten-Lexicon, 4 vols (Leipzig 1750–1751).
- Johnson, J., and S. Gibson, Print and Privilege at Oxford to the Year 1700 (London 1946).
- Jolley, N., 'The Reception of Descartes' Philosophy', in: J. Cottingham, ed., The Cambridge Companion to Descartes (Cambridge 1992) 393–423.
- Jonge, H.J. de, Daniel Heinsius and the Textus Receptus of the New Testament: A Study of his Contributions to the Editions of the Greek Testament Printed by the Elzeviers at Leiden in 1624 and 1633 (Leiden 1971).
- ——, De bestudering van het Nieuwe Testament aan de Noordnederlandse universiteiten en het Remonstrants Seminarie van 1575 tot 1700 (Amsterdam 1980).
- Jorink, E., "Outside God, there is Nothing". Swammerdam, Spinoza and the Janus-Face of the Early Dutch Enlightenment', in: W. van Bunge, ed., *The Early Enlightenment in the Dutch Republic, 1650–1750. Selected Papers of a Conference held at the Herzog August Bibliothek, Wolfenbüttel, 22–23 March 2001* (Leiden 2003) 81–108.
- —, Het 'Boeck der Natuere'. Nederlandse geleerden en de wonderen van Gods schepping 1575–1715 (Leiden 2006).
 - —, '"Horrible and Blasphemous": Isaac La Peyrère, Isaac Vossius and the Emergence of Radical Biblical Criticism in the Dutch Republic', in: J.M. van der Meer and S. Mandelbrote, eds, *Nature and Scripture in the Abrahamic Religions: Up to 1700*, 2 vols (Leiden 2008) II, 429–450.

- —, 'Geef zicht aan de blinden'. Constantijn Huygens, René Desacrtes en het Boek der Natuur (Leiden 2009).
- ——, Reading the Book of Nature in the Dutch Golden Age, 1575–1715 (Leiden and Boston 2010).
- ——, 'Beyond the Lines of Apelles. Johannes Swammerdam, Dutch Scientific Culture and the Representation of Insect Anatomy', in: E. Jorink and B. Ramakers, eds, *Art and Science in the Early Modern Netherlands* (=Netherlands Yearbook for History of Art/Nederlands Kunsthistorisch Jaarboek 61) (Zwolle 2011) 148–183.
- Jorink E. and B. Ramakers, eds, Art and Science in the Early Modern Netherlands (=Netherlands Yearbook for History of Art/Nederlands Kunsthistorisch Jaarboek 61) (Zwolle 2011).
- ——, 'Undivided Territory. "Art" and "Science" in the Early Modern Netherlands', in: E. Jorink and B. Ramakers, eds, Art and Science in the Early Modern Netherlands (=Netherlands Yearbook for History of Art/Nederlands Kunsthistorisch Jaarboek 61) (Zwolle 2011) 6–33.
- Jorink, E. and H. Zuidervaart, 'The Reception of Newton in the Low Countries', in: S. Mandelbrote and H. Pulte, eds, *The Reception of Newton in Europe*, 3 vols (New York and London forthcoming).
- Josephus, F., Opera Iosephi viri inter Iudaeos doctissimi ac disertissimi, quae ad nostram aetatem pervenerunt, omnia... antehac a Graecae linguae peritissimo ac historiarum studiosissimo viro in Latinum sermonem translata, et ad exemplum Graeci codicis accurate distincta. Nunc vero summa cum diligentia chronologia ad caput uniuscuiuscunque folii, cum ex veterum tum recentiorum scriptorum commentariis, cumque scholiis necessariis per doctum quendam virum in communem Rei literariae utilitatem recens concinnata. Cum figuris et indice locupletissimo (Frankfurt 1580).
- Josephus, F, Antiquitatum Iudaicarum libri quatuor priores, ed. E. Bernard (Oxford 1700).

 ——, The Works of Flavius Josephus, 2 vols, tr. W. Whiston (London 1897).
- Junius, F., *The Literature of Classical Art*, eds K. Aldrich, P. Fehl and R. Fehl (Berkeley, Los Angeles and Oxford 1991).
- Katchen, A., Christian Hebraists and Dutch Rabbis: Seventeenth-Century Apologetics and the Study of Maimonides' Mishneh Torah (Cambridge, MA 1984).
- Katz, D.S., 'Isaac Vossius and the English Biblical Critics', in: R.H. Popkin and A. Vanderjagt, eds, Scepticism and Irreligion in the Seventeenth and Eighteenth Centuries (Leiden and Boston 1993) 142–184.
- Keblusek, M., Boeken in de hofstad. Haagse boekcultuur in de Gouden Eeuw (Hilversum 1997).
- ——, Browne, Thomas (bap. 1604, d. 1673), Oxford Dictionary of National Biography, Oxford University Press, Sept 2004; online edn, Jan 2008 [http://www.oxforddnb.com/view/article/3701, accessed 8 Jan 2010].
- Keene, N., 'John Fell: Education, Erudition and the English Church in Late Seventeenth-Century Oxford', *History of Universities* 18 (2003) 62–101.
- Kemke, J., ed., Patricius Junius (Patrick Young) Bibliothekar der Könige Jacob I. und Carl I. von England. Mitteilungen aus seinem Briefwechsel (Leipzig 1898; reprinted Wiesbaden 1969).
- Kenny, N., Curiosity in Early Modern Europe: Word Histories (Wiesbaden 1998).
- ——, The Uses of Curiosity in Early Modern France and Germany (Oxford 2004).
- Kenseth, J., ed., The Age of the Marvelous (Hanover, NH 1991).
- Kircher, A., Oedipus Aegyptiacus; hoc est, universalis hieroglyphicae veterum doctrinae temporum iniuria abolitae instauratio, 3 vols (Rome 1652–1654).
- ——, China monumentis qua sacris qua profanis, nec non variis naturae et artis spectaculis, aliarumque rerum memorabilium argumentis illustrata (Amsterdam 1667).
- ——, Toonneel van China, door zo geestelijke als wereltlijke geheugtekenen, geopent en verheerlijkt (Amsterdam 1668).
- —, La Chine d'Athanase Kirchère ... illustré de plusieurs monuments tant sacrés que profanes (Amsterdam 1670).
- —, Vita admodum Reverendi P. Athanasii Kircheri (Augsburg 1684).

- Klempt, A. Die Säkularisierung der universalhistorischen Auffassung (Göttingen 1960).
- Kley, E. van, 'Europe's 'Discovery' of China and the Writing of World History', *American Historical Review* 76.2 (1971) 358–385.
- ——, 'Qing Dynasty China in Seventeenth-Century Dutch Literature 1644–1700', in: W.F. Vande Walle, ed., *The History of the Relations Between the Low Countries and China in the Qing Era* (1644–1911) (Leuven 2003) 217–234.
- Kornicki, P.F., 'European Japanology at the End of the Seventeenth Century', *Bulletin of the School of Oriental and African Studies* 56.3 (1993) 502–524.
- Lach, D.F., 'The Chinese Studies of Andreas Müller', *Journal of the American Oriental Society* 60.4 (1940) 564–575.
- ——, 'China in Western Thought and Culture', in: P.P. Wiener, ed., *Dictionary of the History of Ideas* (New York 1968) I, 353–373.
- Lach, D.F. and E.J. van Kley, Asia in the Making of Europe. III: A Century of Advance, Book I, Trade, Missions, Literature (Chicago and London 1993).
- La Grange, H.H. de, *Isagoge chronologica* (Paris 1624).
- Lambe, P.J., 'Biblical Criticism and Censorship in Ancien Régime France: The Case of Richard Simon', *Harvard Theological Review* 78 (1985) 149–177.
- Lankhorst, O.S., Reinier Leers (1654–1714). Uitgever & boekverkoper te Rotterdam (Amsterdam 1983).
- [La Peyrère, I.], Praeadamitae, sive exercitatio super versibus duodecimo, decimotertio et decimoquarto, capitis quinti epistolae d. Pauli ad Romanos. Quibus inducuntur primi homines ante Adamum conditi ([Amsterdam] 1655).
- Laplanche, F., L'Écriture, le sacré et l'histoire. Érudits et politiques protestants devant la Bible en France au XVII^e siècle (Amsterdam 1986).
- Lebram, J.C.H., 'Ein Streit um die Hebraïsche Bibel und die Septuaginta', in: T.H. Lunsingh Scheurleer and G.H.M. Posthumus Meyjes, eds, *Leiden University in the Seventeenth Century* (Leiden 1975) 20–63.
- Leibniz, G.F., 'Scientia Generalis; Characteristica (1679)', in: *Philosophischen Schriften*, ed. C.I. Gerhardt (Berlin 1875–1890) VII, 198–199.
- —, Sämtliche Schriften und Briefe (Darmstadt, Leipzig and Berlin 1923–).
- Lem, G.A.C. van der and C.S.M. Rademaker, *Inventory of the Correspondence of Gerardus Joannes Vossius* (1577–1649) (Assen and Maastricht 1993).
- Léonas, A., L'Aube des traducteurs. De l'hébreu au grec: traducteurs et lecteurs de la Bible des Septante (III^e s. av. J.-C. IV^e s. apr. J.-C.) (Paris 2007).
- Leroy, P., and H. Bots, eds, *Claude Saumaise et André Rivet. Correspondance echangée entre* 1632 et 1648 (Amsterdam 1987).
- Letrouit, J., 'La prise de notes de cours sur support imprimé dans les collèges parisiens au XVI^e siècle', in: J.M. Chatelain, ed., *Le livre annoté. Revue de la Bibliothèque Nationale de France* 2 (Paris 1999) 47–56.
- Levine, J.M., 'Strife in the Republic of Letters', in: H. Bots and F. Waquet, eds, *Commercium litterarium. La Communication dans le République des Lettres/Forms of Communication in the Republic of Letters*, 1600–1750 (Amsterdam etc. 1994).
- —, The Autonomy of History: Truth and Method from Erasmus to Gibbon (Chicago 1999).
- Li, W., 'Leibniz, der Chronologiestreit und die Juden in China', in: D.J. Cook et al., eds, *Leibniz und das Judentum* (Stuttgart 2008) 183–208.
- Lindeboom, G.A., ed., The Letters of Jan Swammerdam to Melchisédech Thévenot (Amsterdam 1975).
- Lindgren, U., 'Wissenschaftshistorische Bemerkungen zur Stellung von Martinis *Novus Atlas Sinensis* (1655)', in: R. Malek and A. Zingerle, eds, *Martino Martini S.J.* (1614–1661) und die Chinamission im 17. Jahrhundert (Sankt Augustin 2000) 127–145.
- Lipsius, J., Admiranda, sive De magnitudine Romana libri quattuor (Antwerp 1599).
- —, Epistolae, vol. 13, ed. J. Papy (Brussels 2000).

Lo Cascio, E., 'The Size of Roman Population: Beloch and the Meaning of the Augustean Census Figure', *Journal of Roman Studies* 84 (1994) 23–40.

—, ed., Roma imperiale: una metropoli antica (Rome 2000).

Locke, J., The Correspondence of John Locke, ed. E.S. De Beer, 8 vols (Oxford 1976–1989).

Lunsingh Scheurleer, P., 'Het Witsenalbum; zeventiende-eeuwse Indiase portretten op bestelling', *Bulletin van het Rijksmuseum* 44 (1996) 167–230.

Lüthy, C., 'Where Logical Necessity becomes Visual Persuasion: Descartes' Clear and Distinct Illustrations', in: S. Kusukawa and I. Maclean, eds, *Transmitting Knowledge. Words, Images, and Instruments in Early Modern Europe* (Oxford 2006) 97–134.

Mabillon, J., and M. Germain, *Museum Italicum seu collectio veterum scriptorum ex bibliothecis Italicis*, 2 vols (Paris 1687–1689).

Macaulay, T.B., The History of England from the Accession of James the Second, vol. 1 (Londres 1858).

MacLean, J., 'De kleurentheorie van de Aristotelianen en de opvattingen van De la Chambre, Duhamel, en Vossius in de periode 1640–1670', *Scientiarum Historia* 10 (1968) 208–221.

Mahoney, M., The Mathematical Career of Pierre de Fermat, 1601–1665 (Princeton 1973, 1994²).

Des Maizeaux, P., ed., Scaligerana, Thuana, Perroniana, Pithoeana, et Colomesiana. Ou Remarques historiques critiques, morales & littéraires de Jos. Scaliger, J. Aug. de Thou, le Cardinal Du Perron, Fr. Pithou, & P. Colomiés. Avec les notes de plusieurs savans, 2 vols (Amsterdam 1740).

Malcolm, N., Aspects of Hobbes (Oxford 2002).

Malet, A., 'Keplerian Illusions. Geometrical Pictures versus Optical Images in Kepler's Visual Theory', Studies in History and Philosophy of Science 21 (1990) 1–40.

Mandelbrote, S., 'Newton and Eighteenth-Century Christianity', in: I.B. Cohen and G.E. Smith, eds, *The Cambridge Companion to Newton* (Cambridge 2002) 409–430.

Mandelbrote S. and H. Pulte, eds, *The Reception of Newton in Europe*, 3 vols (New York and London, forthcoming).

Manilius, M., Astronomicon libri quinque, ed. J. Scaliger (Paris 1579; Heidelberg 1590).

----, Astronomicon, ed. A.E. Housman, 5 vols (London 1903–1930).

Manning, J., The Emblem (London 2002).

Marrone, C., Le lingue utopiche (Viterbo 2004).

Martial, Florilegium Epigrammatum Martialis. Iosephus Scaliger Iul. Caesaris F. vertit Graece ad Isaacium Casaubonium (Paris 1607).

Martial, M. Val. Martialis, nova editio ex museo Petri Scriverii (Leiden 1619).

Martianay, J., Continuation de la défense du texte hebreu et de la Vulgate (Paris 1693).

Martini, M., Novus atlas sinensis (Amsterdam 1655).

—, Sinicae historiae decas prima (Munich 1658).

—, Sinicae historiae decas prima (Amsterdam 1659).

—, Opera omnia, eds F. Demarchi and G. Bertuccioli, 3 vols to date (Trento 1998–2002).

Mastroianni, A., 'Kircher e l'Oriente nel Museo del Collegio Romano', in: E. lo Sardo, ed., *Athanasius Kicher; il museo del mondo*, cat. exh. Rome, Palazzo Venezia (Rome 2001) 65–78.

Mathieu, J.-M., 'Huet et Origène', in: S. Guellouz, ed., *Pierre-Daniel Huet (1630–1721), Biblio* 17 (Paris 1994) 229–236.

Matthey, I., 'De betekenis van de natuur en de natuurwetenschappen voor Constantijn Huygens', in: H. Bots et al., eds, *Constantijn Huygens. Zijn plaats in geleerd Europa* (Amsterdam 1973) 334–429.

McClaughlin, T., 'Une lettre de Melchisédec Thévenot', Revue d'histoire des sciences 27 (1974) 123-126.

—, 'Sur les rapports entre la Compagnie de Thévenot et L'Académie royale des Sciences', Revue d'histoire des sciences 28 (1975) 235–242.

- McKendrick, S., 'The Codex Alexandrinus or the Dangers of being a Named Manuscript', in: S. McKendrick and O.A. O'Sullivan, eds, *The Bible as Book. The Transmission of the Greek Text* (London 2003) 1–16.
- McKeon, R.M., 'Une lettre de Melchisédech Thévenot sur les débuts de L'Académie royale des Sciences', Revue d'histoire des sciences 18 (1965) 1–6.
- McKitterick, D., 'Books and Other Collections', in: D. McKitterick, ed., *The Making of the Wren Library* (Cambridge 1995) 50–109.
- McKitterick, R., Perceptions of the Past in the Early Middle Ages (Notre Dame 2006).
- Mela, Pomponius, Libri tres De situ orbis, cum notis I. Gronovii. Iulii Honorii oratoris Excerptum cosmographiae, nunc primum ex MS. editum. Cosmographia, quae falso hactenus Aethicum auctorem praetulit, variis lectionibus ex MS. illustrata (Leiden 1685).
- -----, Kreuzfahrt durch die alte Welt, ed. and tr. K. Broderson (Darmstadt 1994).
- Mercator, G., Chronologia, hoc est temporum demonstratio exactissima ab initio mundi usque ad annum MDLXVIII, ex eclipsibus et observationibus astronomicis omnium temporum, sacris quoque Bibliis et optimis quibusque scriptoribus summa fide concinnata (Cologne 1569).
- Meyïer, K.A. de, 'Notes sur quelques manuscrits de Pierre Bourdelot conservés a Leyde', *Scriptorium* 3 (1949) 257–259.
- -----, Codices Vossiani Graeci et miscellanei (Leiden 1955).
- —, Codices Vossiani Latini, 4 vols (1973–1984).
- Miert, D. van, *Illuster onderwijs*. Het Amsterdamse Athenaeum in de Gouden Eeuw, 1632–1704 (Amsterdam 2005).
- —, 'Een kijkje in de keuken van Colomiès', in: K. van Ommen et al., eds, Aangeraakt. Boeken in contact met hun lezers. Een bundel opstellen voor Wim Gerritsen en Paul Hoftijzer (Leiden 2007) 99–106.
- ——, 'Scaliger', in: J. Bloemendal, ed., On-line Bio-Bibliography of Dutch Humanists: http://www.dwc.knaw.nl/biografie/humbio.
- ——, Humanism in an Age of Science. The Amsterdam Athenaeum in the Golden Age, 1632–1704 (Leiden 2009).
- ——, 'The Limits of Transconfessional Contact in the Republic of Letters around 1600: Scaliger, Casaubon and their Catholic correspondents', in: J. De Landtsheer and H.J.M. Nellen, eds, Between Scylla and Charybdis. Learned Letter Writers Navigating the Reefs of Politics and Religion (1500–1700) (Leiden 2010) 367–408.
- ——, 'Scaliger Scatologus. Rhetorical Roots of Obscene and Abusive Language in the Letters of Joseph Scaliger', *Studies in Early Modern France* 14 (2010) 17–31.
- —, 'Joseph Scaliger, Claude Saumaise, Isaac Casaubon and the Discovery of the *Palatine Anthology* (1606)', *Journal of the Warburg and Courtauld Institutes* 74 (2011) 241–261.
- ——, Communicating Observations in Early Modern Letters, 1500–1675. Epistolography and Epistemology in Science and Scholarship (London, forthcoming).
- , 'Casaubon, Isaac', in: W. Otten and K. Pollman, eds, *The Oxford Guide to the Historical Reception of Augustine* (Oxford 2013) [in press].
- ——, 'Scaliger, Joseph', in: W. Otten and K. Pollman, eds, *The Oxford Guide to the Historical Reception of Augustine* (Oxford 2013) [in press].
- Mill, D., Vetus Testamentum ex versione Septuaginta interpretum (Amsterdam 1725).
- Miller, E.C., Jr, 'The Doctrine of the Church in the Thought of Herbert Thorndike', unpublished D.Phil. thesis (Oxford 1990).
- Miller, P.N., Peiresc's Europe. Learning and Virtue in the Seventeenth Century (New Haven 2000).
- ——, "The "Antiquarianization" of Biblical Scholarship and the London Polyglot Bible (1653–57)', *Journal of the History of Ideas* 62 (2001) 463–482.
- —, 'Peiresc and the First Natural History of the Mediterranean', in: M. Mulsow and J. Assman, eds, *Sintflut und Gedächtnis. Erinnern und Vergessen des Ursprungs* (Munich 2006) 167–196.
- Millington, E., Bibliotheca Oweniana (London 1684).

Molhuysen, P.C., ed., Bronnen tot de geschiedenis der Leidsche universiteit, 7 vols (The Hague 1913–1924).

Molina, J.M., 'True Lies; Kircher's *China illustrata* and the Life Story of a Mexican Mystic', in: P. Findlen, ed., *Athanasius Kircher: The Last Man Who Knew Everything* (New York and London 2004) 365–382.

Momigliano, A., 'Mabillon's Italian Disciples', in: Idem, *Essays in Ancient and Modern Historiography* (Oxford 1977) 277–293.

Monconys, B. de, Journal des Voyages de Monsieur de Monconys. Seconde Partie (Lyon 1666).

Montanus, A., Gedenkwaerdige gesantschappen der Oost-Indische Maetschappy in 't Vereenigde Nederland aen de kaisaren van Japan (Amsterdam 1669).

Montesquieu, C.-L. de, Lettres Persanes II (Cologne 1754).

----, De l'Esprit des Lois (Geneva 1749).

Moran, B.T., ed., Patronage and Institutions: Technology and Medicine at the European Court, 1500–1750 (Rochester 1991).

Morgan, P.T.J., 'The Abbé Pezron and the Celts', Transactions of the Honourable Society of Cymmrodorion (1965) 286–295.

Morison, S., John Fell, the University Press and the 'Fell' Types (Oxford 1967).

Mosshammer, A., *The Chronicle of Eusebius and Greek Chronographic Tradition* (Lewisburg, PA 1979).

——, The Easter Computus and the Origins of the Christian Era (Oxford and New York 2008).

Mulerius, N., Tabulae Frisicae Lunae-Solares quadruplices; e fontibus Cl. Ptolemaei, Regis Alfonsi, Nic. Copernici, et Tychonis Brahe, recens constructae opera et studio Nicolai Mulerii Doct. Medici et Gymnasiarchae Leowardiani. Quibus accessere Solis tabulae totidem; hypotheses Tychonis illustratae: Kalendarium Rom. vetus, cum methodo Paschali emendata (Alkmaar 1611).

Muller, R.A., 'The Debate over the Vowel Points and the Crisis in Orthodox Hermeneutics', *Journal of Medieval and Renaissance Studies* 10 (1980) 53–72.

Müller, S., Kritik und Theologie. Christliche Glaubens- und Schrifthermeneutik nach Richard Simon (1638–1712) (St. Ottilien 2004).

Mungello, D.E., Curious Land. Jesuit Accommodation and the Origins of Sinology (Honolulu 1989).

Neue Deutsche Biographie, vol. 8 (Berlin 1969).

Neveu, B., L'Erreur et son juge. Remarques sur les censures doctrinales à l'époque moderne (Naples 1993).

——, Culture religieuse et aspirations réformistes à la cour d'Innocent XI', in: Idem, Érudition et religion aux XVII^e et XVIII^e siècles (Paris 1994) 235–276.

Nicéron, J.-P., Mémoires pour servir à l'histoire des hommes illustres dans la republique des lettres (Paris 1727–1754).

Nieuhof, J., Het gezantschap der Neêrlandtsche Oost-Indische Compagnie, aan den grooten Tartarischen Cham, den tegenwoordigen keizer van China... Beneffens een naukeurige beschryving der Sineesche steden, dorpen, regeering... (Amsterdam 1665).

——, An Embassy from the East-India Company of the United Provinces to the Grand Tartar Cham, tr. I. Ogilby (London 1669).

Noack, L., 'Der Berliner Propst, Orientalist und Sinologe Andreas Müller (1630–1694); ein bio-bibliographischer Versuch', *Nachrichten der Gesellschaft für Natur und Völkerkunde Ostasiens (NOAG)* 157 (1995) 1–39.

Nothaft, P., 'Noah's Calendar: The Chronology of the Flood Narrative and the History of Astronomy in Sixteenth- and Seventeenth-Century Scholarship', *Journal of the Warburg and Courtauld Institutes* 74 (2011) 191–211.

Nouvelles République des lettres, III, January 1685 (Amsterdam 1685).

Oak, R.B., 'Montesquieu and Hume', *Modern Language Quarterly* 2 (1941) 225–248. *OBI*: see [Borrichius, O].

OCCH: see [Huygens, Christiaan].

Offenberg, A.K., 'Some Remarks Regarding Six Autograph Letters by Menasseh ben Israel in the Amsterdam University Library', in: Y. Kaplan, H. Méchoulan and R.H. Popkin, eds, *Menasseh ben Israel and his World* (Leiden 1989) 191–198.

[Oldenburg, H.], *The Correspondence of Henry Oldenburg*, eds A.R. Hall and M. Boas Hall, 11 vols (London 1965–1986).

Pattison, M., Isaac Casaubon, 1559–1614 (Oxford, 2nd edition 1892).

Pearson, D., 'What Can We Learn by Tracking Multiple Copies of Books?', in: R. Myers, M. Harris and G. Mandelbrote, eds, *Books on the Move. Tracking Copies through Collections and the Book Trade* (New Castle and London 2007) 17–37.

[Pearson, J.], ed., Vetus testamentum Graecum ex versione septuaginta interpretum (Cambridge 1665).

—, Vindiciae epistolarum S. Ignatii (Cambridge 1672).

Penenc, H., Des Jésuites au Royaume du Prêtre Jean (Éthiopie). Stratégies, rencontres et tentatives d'implantation 1495–1633 (Paris 2003).

Perkins, F., Leibniz and China; a Commerce of Light (Cambridge 2004).

Petau, D., De doctrina temporum, 3 vols (Venice 1757).

Peters, M., 'From the Study of Nicolaes Witsen (1641-1717): his Life with Books and Manuscripts', *Lias* 21 (1994) 1-49.

——, '"Mercator sapiens" (de wijze koopman); het wereldwijde onderzoek van Nicolaes Witsen (1641–1717), burgemeester en VOC-bewindhebber van Amsterdam' (Dissertation Rijksuniversiteit Groningen 2008).

—, De wijze koopman: het wereldwijde onderzoek van Nicolaes Witsen (1641–1717), burgemeester en VOC-bewindhebber van Amsterdam (Amsterdam 2010).

Petit, P., Dissertation sur la nature des comètes (Paris 1665).

Petty, W., A Collection of the Yearly Bills of Mortality [within the London District] from 1657 to 1758, inclusive. Together with Several other Bills of an Earlier Date. To which are Subjoined I. Observations on the Bills of Mortality by Capt. J. Graunt. II. Another Essay... concerning the growth of the City of London... by Sir W. Petty... III. Observations on the past growth and the present state of the City of London... by C. Morris. IV. A Comparative View of the Diseases and Ages, and a Table of the Probabilities of Life for the Last Thirty Years. By J. P., Esq., F.R.S., T. Birch et D.D., éds, 2 vols (London 1759).

Pezron, P., L'Antiquité des tems rétablie et defenduë (Amsterdam 1687).

----, Défense de l'antiquité des tems (Paris 1691).

Pfeiffer, R., History of Classical Scholarship, from 1300 to 1850 (Oxford 1999).

Philosophical Transactions of the Royal Society 1 (1665).

Pinot, V., La Chine et la formation de l'esprit philosophique en France (1640–1740) (Paris 1932).

[Pliny], C. Plinii Secundi Naturalis historiae, Tomus Primus [-Tertius]. Cum commentariis et adnotationibus Hermolai Barbari, Pintiani, Rhenani, Gelenii, Dalechampii, Scaligeri, Salmasii, Is. Vossii, et variorum. Accedunt praeterea variae lectiones ex mss. compluribus ad oram paginarum accurate indicatae. Item Ioh. Fr. Gronovii Notarum Liber singularis ad illustrem virum Iohannem Capelanum (Leiden 1669 [-1668]).

Plomer, H.R., et al., A Dictionary of the Printers and Booksellers Who Were at Work in England, Scotland and Ireland from 1668 to 1725 (London 1922).

Pococke, E., A Commentary on the Prophecy of Hosea (Oxford 1685).

Pomian, K., Collectioneurs, amateurs et curieux. Paris, Venise: XVI^e-XVII^e siècle (Paris 1987).

Poole, W., 'Seventeenth-Century Preadamism, and an Anonymous English Preadamist', The Seventeenth Century 19 (2004) 1–35.

——, 'Francis Lodwick's Creation: Theology and Natural Philosophy in the Early Royal Society', *Journal of the History of Ideas* 66 (2005) 245–263.

Popkin, R.H., *Isaac La Peyrère* (1596–1676) (Leiden 1987).

Porter, D., Ideographia; The Chinese Cipher in Early Modern Europe (Stanford 2001).

- Ptolemaeus, Geographia universalis (Basel 1542).
- Quantin, J.-L., L'Orthodoxie, la censure et la gloire. La difficile édition princeps de l'épître de Barnabé, de Rome à Amsterdam (1549–1646)', in: M. Cortesi, ed., "Editiones principes" delle opere dei Padri Greci e Latini (Florence 2006) 103–162.
- ——, 'Anglican Scholarship Gone Mad? Henry Dodwell (1641–1711) and Christian Antiquity', in: C. Ligota and J.-L. Quantin, eds, *History of Scholarship* (Oxford 2006) 305–356.
- ——, The Church of England and Christian Antiquity (Oxford 2009).
- Quennehen, E., 'A propos des Préadamites', *La Lettre Clandestine* 3 (1994) [entire volume].

 ——, 'Un nouveau manuscrit des *Préadamites'*, *La Lettre Clandestine* 4 (1995) [entire volume].
- Rademaker, C.S.M., *Life and Works of Gerardus Joannes Vossius* (1577–1649) (Assen 1981).

 ——, 'Archbishop James Ussher (1581–1656) and the Dutch Vossius Family', *Lias* 33 (2006) 89–128.
- Ramsey, R., 'China and the Ideal of Order in John Webb's "An Historical Essay..."', *Journal of the History of Ideas* 62 (2001) 483–503.
- Randles, W.G.L., South-east Africa as Shown on Selected Printed Maps of the Sixteenth Century', *Imago Mundi* 13 (1956) 69–88.
- Ranson, P., Richard Simon ou du caractère illégitime de l'Augustinisme en théologie (Lausanne 1990).
- Raz-Krakotzkin, A., The Censor, the Editor, and the Text. The Catholic Church and the Shaping of the Jewish Canon in the Sixteenth Century, tr. J. Feldman (Philadelphia 2007).
- Renaudot, E., Anciennes relations des Indes et de la Chine, de deux voyageurs mahométans, qui y allèrent dans le neuvième siècle, traduites d'arabe en francois (Paris 1718).
- Rietbergen, P., 'Witsen's World: Nicolaas Witsen (1641–1717) between the Dutch East-India Company and the Republic of Letters', *Itinerario* 9 (1985) 121–134.
- Rieu, G. du, et al., eds, Album studiosorum Academiae Lugduno Batavae MDLXXV– MDCCCLXXV; accedunt nomina curatorum et professorum per eadem secula (The Hague 1875).
- Rivosecchi, V., Esotismo in Roma barocca; studi sul Padre Kircher (Rome 1982).
- Rogerius, A., *La Porte ouverte pour parvenir à la connaissance du paganisme caché* (Amsterdam 1671).
- Roldanus, C., Coenraad van Beuningen: staatsman en libertijn (The Hague 1931).
- Romburgh, S. van, ed., For My Worthy Freind Mr Franciscus Junius'. An Edition of the Correspondence of Francis Junius F.F. (1591–1677) (Leiden 2004).
- Romer, F.E., Pomponius Mela's Description of the World (Ann Arbor 1998).
- Ros, J., De studie van het Bijbelgrieksch van Hugo Grotius tot Adolf Deissmann (Nijmegen 1940).
- Rossi, A. de', The Light of the Eyes, ed. and tr. J. Weinberg (New Haven 2001).
- Rossi, P., The Dark Abyss of Time: The History of the Earth and the History of Nations from Hooke to Vico, tr. L. Cochrane (Chicago 1984).
- Ruinart, T., Abregé de la vie de Dom Jean Mabillon (Paris 1709).
- Ruler, J.A. van, *The Crisis of Causality. Voetius and Descartes on God, Nature and Change* (Leiden and Boston 1995).
- —, 'Craanen, Theodoor', in: W. van Bunge et al., eds, *The Dictionary of Seventeenth and Eighteenth-Century Dutch Philosophers* (Bristol 2003) 227–228.
- Russell, J.B., *Inventing the Flat Earth* (New York 1991).
- Samuel, W.S., 'Charles-Marie de Veil', *Baptist Quarterly*, NS 5 (1930–1931) 74–85, 118–129, 177–189.
- Sandrart, J. von, *Teutsche Academie der edlen Bau-, Bild- und Mahlerey-kunst* (Nuremberg 1675).
- Saumaise, C., ed., Historiae Augustae scriptores VI (Paris 1620).
- —, Plinianae exercitationes in Caii Iulii Solini polyhistora. İtem Caii Iulii Solini polyhistor ex veteribus libris emendatus (Paris 1629).
- Sauvy, A., Livres saisis à Paris entre 1678 et 1701 (The Hague 1972).

- Scaliger, J., Castigationes in Catullum, Tibullum, Propertium (Paris 1577), behind: [Catullus], Catulli, Tibulli, Propertii nova editio.
- ——, ed., Thesaurus temporum. Eusebii Chronicorum Canonum omnimodae historiae libri duo, interprete Hieronymo. Item auctores omnes derelicta ab Eusebio et Hieronymo continuantes (Leiden 1606).
- ——, Opuscula varia ante hac non edita, nunc vero multis partibus aucta (Paris 1610; second edition: Frankfurt 1612).
- —, Poemata omnia, ex Museio P. Scriverii ([Leiden] 1615; second edition: Berlin 1864).
- —, Epistolae omnes quae reperiri potuerunt nunc primum collectae ac editae, [ed. D. Heinsius] (Leiden 1627).
- —, Lettres françaises inédites de Joseph Scaliger, ed. P. Tamizey de Larroque (Agen and Paris 1879).
- ——, The Correspondence of Joseph Justus Scaliger (1540–1609), 8 vols, eds P. Botley and D. van Miert (Geneva 2012).
- Schama, S., The Embarrassment of Riches: An Interpretation of Dutch Culture in the Golden Age (New York 1987).
- Scheib, A., 'Bruyn, Johannes de (1620–1675)', in W. van Bunge et al., eds, *The Dictionary of Seventeenth and Eighteenth-Century Dutch Philosophers* (Bristol 2003) 175–176.
- Schiller, J. and J. Théodoridès, 'Sténon et les milieu scientiques parisiens', in: G. Scherz, ed., Steno and Brain Research in the Seventeenth Century (Oxford etc. 1968) 155–170.
- Schnedermann, G., Die Controverse des Ludovicus Cappellus mit den Buxtorfen über das Alter der Hebraïschen Punctation (Leipzig 1879).
- Schotanus, C., Diatribe de authoritate versionis Graecae, quae dicitur LXX interpretum (Francker 1662).
- Schrijvers, P.H., Sunt lacrimae rerum. Een bijdrage tot de geschiedenis der tranen (Leiden 2001).
- Schuldenburg, S. von der, Leibniz als Sprachforscher (Frankfurt am Main 1973).
- Schurzfleisch, H.L., ed., Notitia Bibliothecae principalis Vinariensis. Accedunt Claudii Salmasii in Chronicum Hieronymi Latinum variae lectiones et emendationes tum et ad Chronicum Eusebii Graecum et alterum Paschale castigationes et animadversiones passim e schedis auctae et locupletatae (Frankfurt 1712).
- Schuster, J.A. 'The Scientific Revolution', in: R.C. Olby et al., eds, Companion to the History of Modern Science (London 1990) 217-242.
- ——, 'Descartes *opticien*. The construction of the law of refraction and the manufacture of its physical rationales, 1618–1629', in: S. Gaukroger et al., eds, *Descartes' Natural Philosophy* (London 2000) 258–312.
- Sebeok, T., 'The Seventeenth-Century Cheremis: The Evidence from Witsen', in: M. Black and W. Smalley, eds, *On Language, Culture and Religion: in Honor of Eugene A. Nida* (The Hague 1974) 301–314.
- Seccombe, T., and F.F. Blok, 'Isaac Vossius', in: H.C.G. Matthew and B. Harrison, eds, Oxford Dictionary of National Biography (http://www.oxforddnb.com/view/article/28356, accessed 27 Sept 2010).
- Selm, B. van, Een menighte treffelijcke Boecken. Nederlandse boekhandelscatalogi in het begin van de zeventiende eeuw (Utrecht 1987).
- Shalev, Z., 'Sacred Geography, Antiquarianism, and Visual Erudition: Benito Arias Montano and the Maps of the Antwerp Polyglot Bible', *Imago Mundi* 55 (2003) 56–80.
- Shapin, S., The Scientific Revolution (Chicago 1996).
- Shapiro, A.E., 'The *Optical Lectures* and the foundations of the theory of optical imagery', in: M. Feingold, ed., *Before Newton. The Life and Times of Isaac Barrow* (Cambridge 1990) 105–178.
- Shelford, A.G., 'Of Sceptres and Censors: Biblical Interpretation and Censorship in Seventeenth-Century France', *French History* 20 (2006) 161–181.
- Sherman, W.H., Used Books. Marking Readers in Renaissance England (Philadelphia 2008).

- Simon, R., Histoire critique du Vieux Testament ([Paris 1678]).
- —, Histoire critique du Vieux Testament ([Amsterdam] 1680).
- —, Réponse à la lettre de M. Spanheim (Amsterdam 1680).
- —, A Critical History of the Old Testament, tr. H. D[ickinson] (London 1682).
- ——, Disquisitiones criticae de variis per diversa loca et tempora Bibliorum editionibus: quibus accedunt Castigationes theologi cuiusdam Parisiensis ad opusculum Isa. Vossii De Sibyllinis oraculis, et eiusdem responsionem ad obiectiones nuperae criticae sacrae (London 1684).
- —, Critical Enquiries into the Various Editions of the Bible, ed. R. Denison, tr. N.S. (London 1684).
- —, Histoire critique du Vieux Testament (Rotterdam 1685).
- —, Historica critica Veteris Testamenti, tr. N.A. de Versé, new edn (Amsterdam 1685).
- —, Opuscula critica adversus Isaacum Vossium (Edinburgh [i.e. Rotterdam] 1685).
- —, Réponse au livre intitulé Sentimens de quelques theologiens de Hollande (Rotterdam 1686).
- ——, Histoire critique du texte du Nouveau Testament, où l'on établit la vérité des actes sur lesquels la Religion chrétienne est fondée (Rotterdam 1689).
- —, Bibliotheque critique ou recüeil de diverses pieces critiques, 4 vols (Amsterdam 1708–1710).
- —, Lettres choisies, ed. [A. A.] Bruzen [de] la Martinière, 4 vols (Amsterdam 1730).
- ——, Additions aux Recherches curieuses sur la diversité des langues et religions d'Edward Brerewood, ed. J. Le Brun and J.D. Woodbridge (Paris 1983).
- Slater, V., 'Aubrey de Vere', in: H.C.G. Matthew and B. Harrison, eds, Oxford Dictionary of National Biography (http://www.oxforddnb.com/view/article/28206, accessed 27 Sept 2010).
- Smet, R. De, Hadrianus Beverlandus (1650–1716). Non unus e multis peccator. Studie over het leven en werk van Hadriaan Beverland (Brussel 1988).
- ——, 'Vossius, Isaac', in: W. Van Bunge et al., eds, *The Dictionary of Seventeenth and Eighteenth-Century Dutch Philosophers* (Bristol 2003) 1049–1052.
- Smith, A.M., Descartes's Theory of Light and Refraction: A Discourse on Method (Philadel-phia 1987).
- ——, Alhacen's theory of Visual Perception (Philadelphia 2001).
- Smith, P.H. and P. Findlen, eds, Merchants and Marvels. Commerce, Science, and Art in Early Modern Europe (New York and London 2002).
- Smith, T., ed., Admodum reverendi & doctissimi viri, D. Roberti Huntingtoni, S. Theologiae doctoris, et Episcopi Rapotensis, Epistolae (London 1704).
- —, Vita clarissimi & doctissimi viri, Edwardi Bernardi (London 1704).
- Soll, J., The Information Master. Jean-Baptiste Colbert's Secret State Intelligence System (Ann Arbor 2009).
- [Spanheim, E.], Lettre à un ami, où l'on rend compte d'un livre, qui a pour titre, Histoire critique du Vieux Testament, publié à Paris en 1678 (Amsterdam 1679). Reprinted in:
 R. Simon, Histoire critique du Vieux Testament (Rotterdam 1685) 563-622.
- Spinka, M., 'Acquisition of the Codex Alexandrinus by England', *Journal of Religion* 16 (1936) 10–29.
- Spinoza, B., *Briefwisseling*, ed. and tr. F. Akkerman, H.G. Hubbeling and A.G. Westerbrink (Amsterdam 1977).
- Spitzelius, T., De re literaria Sinensium commentarius, in quo scripturae pariter ac philosophiae Sinicae specimina exhibentur, et cum aliarum gentium, praesertim Aegyptiorum, Graecorum, et Indorum reliquorum literis atque placitis conferuntur (Leiden 1660).
- Steenbakkers, P., et al., 'A Clandestine Notebook (1678–1679) on Spinoza, Beverland, Politics, the Bible and Sex', *Lias* 38.2 (2011) 225–365.
- Steineman, J., Richard Simon. Les origines de l'exégèse biblique (Paris 1960).
- Steiner, B., Die Ordnung der Geschichte: Historische Tabellenwerke in der Frühen Neuzeit (Cologne, Weimar and Vienna 2008).

- Stegeman, S., Patronage en dienstverlening. Het netwerk van Theodorus Janssonius van Almeloveen (1657–1712) in de Republiek der Letteren (Nijmegen 1996).
- Stewart, M., The Courtier and the Heretic. Leibniz, Spinoza and the Fate of God in the Modern World (New Haven and London 2005).
- Stolzenberg, D., 'The Egyptian Crucible of Truth and Superstition; Athanasius Kircher and the Hieroglyphic Doctrine', in: A.-C. Trepp and H. Lehmann, eds, *Antike Weisheit und kulturelle Praxis*; *Hermetismus in der Frühen Neuzeit* (Göttingen 2001) 145–164.
- Strabo, Strabonis rerum geographicarum libri XVII. Isaacus Casaubonus recensuit, summoque studio et diligentia, ope etiam veterum codicum, emendavit ac commentariis illustravit ([Geneva] 1587).
- Stroumsa, G.G., 'Richard Simon: From Philology to Comparatism', Archiv für Religionsgeschichte 3 (2001) 89–107.
- Sturdy, D.J., Science and Social Status: the Members of the Académie des Sciences, 1666–1750 (Woodbridge 1995).
- Sullivan, M., 'Sandrart on Chinese Painting', Oriental Art 1.4 (1948) 159-161.
- ——, The Meeting of Eastern and Western Art (London 1973) 93–94.
- Sun Xiaoli, 'Leibniz, les symboles I Ching et les idéogrammes', in: Y. Daiyun and A. le Pichon, eds, La Licorne et le dragon; Les Malentendus dans la recherche de l'universel (Beijing and Paris 1995) 109–122.
- Sutcliffe, A., Judaism and Enlightenment (Cambridge 2003).
- Swammerdam, J., Historia generalis insectorum ofte Algemeene verhandeling van de bloedeloose dierkens (Utrecht 1669).
- Syncellus, G., Ecloga Chronographica, ed. A. Mosshammer (Leipzig 1984).
- —, Chronography, tr. W. Adler and P. Tuffin (Oxford 2002).
- Theocritus, Idyllia et epigrammata...Moschi, Bionis, Simmii opera quae exstant, Iosephi Scaligeri et Isaaci Casauboni emendationes seorsim dabuntur ([Heidelberg] 1596).
- Thévenot, M., Relations de divers voyages curieux, qui n'ont point esté publiées; ou qui esté traduit d'Hacluyt, de Parchas, & d'autres Voyageurs Anglois, Hollandais, Portugais, Allemands, Espagnols, 4 vols (Paris 1663–1672).
- -----, Recueil des voyages (Paris 1681)
- Thijssen-Schoute, C.L., Nederlands Cartesianisme (Amsterdam 1954).
- Thouard, D., 'Die Folgen der Philologisierung', in: D. Thouard, F. Vollhardt and F. Mariani Zini, eds *Philologie als Wissensmodell/La philologie comme modèle de savoir* (Berlin 2010), 3–18.
- Tolosani, G.M. [writing under the pseudonym Ioannes Lucidus Samotheus], *Opusculum de emendationibus temporum* (Venice 1537).
- Toomer, G.J., Eastern Wisedome and Learning. The Study of Arabic in Seventeenth-Century England (Oxford 1996).
- Trigault, N., De christiana expeditione apud Sinas (Cologne 1618).
- Turner, A.J., 'Melchisédech Thévenot, the Bubble Level and the Artificial Horizon', *Nuncius* 7 (1992) 131–145.
- Twells, L., ed., *The Theological Works of the Learned Dr. Pocock*, 2 vols (London 1740).
- Udal, J.O., The Nile in Darkness. Conquest and Exploration 1504–1862 (Norwich 1998).
- Ultee, M., The Abbey of St. Germain des Prés in the Seventeenth Century (New Haven 1981).
- Ulrichs, F., Johan Nieuhofs Blick auf China (1655–1657); Die Kupferstiche in seinem Chinabuch und ihre Wirkung auf den Verleger Jacob van Meurs (Wiesbaden 2003).
- Ussher, J., De Graeca Septuaginta, interpretum versione syntagma (London 1655).
- ——, Chronologia sacra, in: Idem, Annales veteris et novi testamenti, . . . una cum rerum Asiaticarum et Aegyptiacarum chronico (Geneva 1722), 1–88 (fourth pagenumbering).
- Valery, M., ed., Correspondance inédite de Mabillon et de Montfaucon avec l'Italie, 3 vols (Paris 1846–1847).
- Valla, L., On the Donation of Constantine, ed. and tr. G.W. Bowersock (Cambridge, MA 2007).

- Veil, C.-M. de, Lettre de Mr. de Veil, docteur en theologie & ministre du Saint Evangile, à Monsieur Boisle, de la Societé Royalle des Sciences à Londres. Pour prouver contre l'autheur d'un livre nouveau intitulé, Critique du Vieux Testament, que la seule Ecriture est la regle de la foi (London 1678).
- ——, Lettre de Mr. C.M. de Veil Docteur en Theologie, et M.D.S.E. à Mr. T. Maimbourg écuyer, & precepteur de Monseigneur le Duc de Richemont (London 1685).
- Verbeek, Th., Descartes and the Dutch: Early Reactions to Cartesian Philosophy, 1637–1650 (Carbondale 1992).
- Verbrugghe G., and J. Wickersham, Berossos and Manetho, Introduced and Translated: Native Traditions in Ancient Mesopotamia and Egypt (Ann Arbor 1996).
- Verdegaal, C.M.L., De Statenbijbel en de rabbijnen (Tilburg 1998).
- Vermij, R.H., 'Ubbo Emmius en de chronologie', in: W.J. Kuppers, ed., *Ubbo Emmius: een Oostfries geleerde in Groningen = Ubbo Emmius: ein ostfriesischer Gelehrter in Groningen*, (Groningen and Leer 1994) 166–185.
- , 'Bijdrage tot de bio-bibliografie van Johannes Hudde', GEWINA 18 (1995) 25–35.
- ——, 'Een nieuw concept: de wetten der natuur', in: F. Egmond, E. Jorink and R. Vermij, eds, Kometen, monsters en muilezels. Het veranderende natuurbeeld en de natuurwetenschap in de zeventiende eeuw (Haarlem 1999) 105–119.
- ——, The Calvinist Copernicans. The Reception of the New Astronomy in the Dutch Republic, 1575–1750 (Amsterdam 2002).
- Vermij, R. and E. Atzema, 'Specilla circularia: an unknown work by Johannes Hudde', Studia Leibnitiana 27 (1995) 104–121.
- Virol, M., Vauban: de la gloire du roi au service de l'État (Seyssel 2003).
- —, 'Connaître et accroître les peuples du royaume: Vauban et la population', *Population* 56.5 (2001) 845–875.
- Vossius, G.J., De arte grammatica libri VII (Amsterdam 1635).
- ——, De philosophia et philosophorum sectis libri II (The Hague 1650).
- ——, De quatuor artibus popularibus (Amsterdam 1650).
- —, Chronologiae sacrae isagoge sive de ultimis mundi antiquitatibus, ac imprimis de temporibus rerum Hebraearum dissertationes viii (The Hague 1659).
- ——, De theologia gentili et physiologia Christiana, sive de origine ac progressu idololatriae, deque naturae mirandis quibus homo adducitur ad Deum (sec. ed. Amsterdam 1668).
- ——, De artium et scientiarum natura ac constitutione (Amsterdam 1696).
- ——, De annis Iesu Christi dissertatio prima; quae est de Christi anno natali, in: Idem, Tractatus theologici (Amsterdam 1701) 65–81.
- —, De theologia gentili et physiologia Christiana (third ed. Amsterdam 1700).
- Vossius, I., ed., Periplus Scylacis Caryandensis cum tralatione, et castigationibus Isaac Vossii. Accedit Anonymi Ponti Euxini, e bibliotheca Claudii Salmasii, cum eiusdem Is. Vossii versione ac notis (Amsterdam 1639).
- —, ed., Epistolae genuinae S. Ignatii martyris (Amsterdam 1646; second ed., London 1680).
- ----, Observationes ad Pomponium Melam de situ orbis (The Hague 1658).
- ——, Dissertatio de vera aetate mundi (The Hague 1659).
- —, Castigationes ad scriptum Georgii Hornii de aetate mundi (The Hague 1659).
- —, Discours van den rechten ouderdom der wereldt (Amsterdam 1660).
- ——, De Septuaginta interpretibus, eorumque tralatione & chronologia dissertationes (The Hague 1661).
- —, De lucis natura et proprietate (Amsterdam 1662).
- ——, *Appendix ad librum de LXX interpretibus* (The Hague 1663).
- —, Responsum ad objecta Joh. de Bruyn (The Hague 1663).
- ——, De Nili et aliorum fluminum origine (The Hague 1666).
- ——, 'Appendix ad scriptum de natura et proprietate lucis', in: *De Nili et aliorum fluminum origine* (The Hague 1666) 81–157.

- ——, Catalogus librorum illustrium, quorum auctio habebitur Lugduni in Batavis in aedibus Petri Leffen Sub Signo Phaenicis. Ultimo Novembris Anni 1666. hora nona matutina (Leiden 1666).
- —, Dissertation touchant l'origine du Nil et autres fleuves ... avec la description de plusieurs royaumes qui sont dans l'interieur de l'Afrique ... traduite du Latin d'Isaac Vossius et augmentée d'une relation fort exacte du Père Païs ... Tirée des Mémoires du R. P. Kirker (Paris 1667).
- —, De Sibyllinis aliisque quae Christi natalem praecessere oraculis....Accedit eiusdem responsio ad obiectiones nuperae Criticae Sacrae (Oxford 1679).
- ——, Responsio, in: Idem, De Sibyllinis aliisque quae Christi natalem praecessere oraculis. . . . Accedit eiusdem responsio ad obiectiones nuperae Criticae Sacrae (Oxford 1679), separately paginated.
- —, Variarum observationum liber (London 1685).
- —, Observationum ad Pomponium Melam appendix. Accedit ejusdem ad tertias P. Simonii objectiones responsio (London 1686).
- —, 'Extrait d'une Lettre de M. V. écrite de Londres de 23. de Fevrier 1688 à M. V.B. touchant les Longitudes, le Marées et le Fleuve Oby', *Bibliothèque universelle et historique* 8 (March 1688) 429–433.
- —, A treatise concerning the motion of the seas and the winds (London 1677), facsimile ed. by M. Deacon (New York 1993).
- Vries, D. de, 'Atlases and Maps from the Library of Isaac Vossius (1618–1689)', *International Yearbook of Cartography* 21 (1981) 177–194.
- Vries, S. de, 'Vossius (Isaac)', in: *Nieuw Nederlandsch Biografisch Woordenboek*, 10 vols, eds, P.C. Molhuysen and P.J. Blok (Leiden 1911–1937) I, cols 1519–1525.
- Waard, C. de, 'Le manuscrit perdu de Snellius sur la réfraction', Janus 39 (1935) 51-72.
- Wacholder, B.Z., 'Biblical Chronology in the Hellenistic World Chronicles', *Harvard Theological Review* 61 (1968) 451–481.
- Walker, D.P., 'Leibniz and Language', in: R.S. Woolhouse, ed., *Gottfried Wilhelm Leibniz; Critical Assessments* (New York and London 1994) 436–451.
- Wall, E.G.E. van der, *De mystieke chiliast Petrus Serrarius (1600–1669) en zijn wereld* (Leiden 1987).
- Wallis, J., 'An appendix written by way of letter to the publisher being an answer to some objections, made by several persons', *Philosophical Transactions of the Royal Society* 2 (1666) 281–289.
- Wallraff, M., ed., Julius Africanus und die christliche Weltchronik (Berlin 2006).
- Walravens, H., China illustrata. Das europäische Chinaverständnis im Spiegel des 16. bis 18. Jahrhunderts (Weinheim 1987).
- Walton, B., 'Prolegomena', in: Idem, *Biblicus apparatus chronologico-topographico-philologicus* (Zurich 1673).
- Waquet, F., Le modèle français et l'Italie savante. Conscience de soi et perception de l'autre dans la République des lettres (1660–1750) (Rome 1989).
- Ward, C.E., 'Religio Laici and Father Simon's History', Modern Language Notes 61 (1946) 407–412.
- Wasserstein, A. and D.J. Wasserstein, The Legend of the Septuagint (Cambridge 2006).
- Wauters, T., 'Libertinage érudit and Isaac Vossius: A Case Study', The Journal for Early Modern Cultural Studies 12.2 (2012) 37–53.
- Webb, J., An Historical Essay Endeavouring the Probability that the Language of the Empire of China is the Primitive Language (London 1669).
- Weinberg, J., 'The Quest for Philo in Sixteenth-Century Jewish Historiography', in: A. Rapoport-Albert et al., eds, *Jewish History: Essays in Honour of Chimen Abramsky* (London 1988) 163–187.
- Weststeijn, T., 'Spinoza sinicus: An Asian Paragraph in the History of the Radical Enlightenment', Journal of the History of Ideas 68 (2007) 537–561.

——, 'Pictography and Utopianism in the Seventeenth Century', in: R. Bod, J. Maat and T. Weststeijn, eds, *The Making of the Humanities*. I: *The Emergence of the Humanities in Early Modern Europe* (Amsterdam 2010) 133–159.

—, From Hieroglyphs to Universal Characters. Pictography in the Early Modern Netherlands', in: E. Jorink and B. Ramakers, eds, *Art and Science in the Early Modern Netherlands (Netherlands Yearbook for History of Art/Nederlands Kunsthistorisch Jaarboek* 61) (Zwolle 2011) 238–281.

Wetenhall, E., Scripture Authentick, and Faith Certain (London 1686).

Wickenden, N., G.J. Vossius and the Humanist Concept of History (Assen 1993).

Widmaier, R., Die Rolle der chinesischen Schrift in Leibniz' Zeichentheorie (Wiesbaden 1983).

Wielema, M., 'Adriaan Koerbagh: Biblical Criticism and Enlightenment', in: W. van Bunge, ed., *The Early Enlightenment in the Dutch Republic, 1650–1750. Selected Papers of a Conference held at the Herzog August Bibliothek, Wolfenbüttel 22–23 March 2001* (Leiden and Boston 2003) 61–80.

—, The March of the Libertines. Spinozists and the Dutch Reformed Church (1660–1750) (Hilversum 2004).

Wild, F., Naissance du genre des ana (1574–1712) (Paris 2001).

Wilde, E., Geschichte der Optik. 1. Teil (Berlin 1838).

Wills, J.E., 'Some Dutch Sources on the Jesuit China Mission, 1662–1687', Archivum historicum Societatis Iesu 54 (1985) 267–294.

Wilson, C., The Invisible World: Early Modern Philosophy and the Invention of the Microscope (Princeton 1995).

Witkam, J.J., Jacobus Golius (1596–1667) en zijn handschriften (Leiden 1980).

Witsen, N., ΠΡΟΓΝΩΣΤΙΚΟΝ quod...sub praesidio clarissimi doctissimique viri D. Alexandri de Bie...defendendum publice suscepit Nicolaus Witsen (Amsterdam 1662).

—, Aeloude en hedendaegsche scheeps-bouw en bestier (Amsterdam 1671).

—, Noord en oost Tartarye, ofte bondig ontwerp voor enige dier landen en volken welke voormaels bekend zijn geweest (Amsterdam 1692).

Witt, J. de, Brieven van Johan de Witt, ed. R. Fruin, 4 vols (Amsterdam 1906–1913).

Wolf, A., 'An Addition to the Correspondence of Spinoza', *Philosophy* 10.38 (1935) 200–204.

Woodbridge, J.D., 'Richard Simon le "père de la critique biblique"', in: J.R. Armogathe, ed., *Le Grand Siècle et la Bible* (Paris 1989).

[Wordsworth, C.], ed., The Correspondence of Richard Bentley, 2 vols (London 1842).

Wormius, O., Olai Wormii et ad eum doctorum virorum epistolae (Copenhagen 1751).

Yardeni, M., 'La vision des Juifs et du Judaïsme dans l'oeuvre de Richard Simon', Revue des Études juives 129 (1970) 179–203.

Yoffie, A.M. 'Cocceius and the Jewish Commentators', *Journal of the History of Ideas* 65 (2004) 383–398.

Young, D.A., The Biblical Flood (Grand Rapids 1995).

Young, P., ed., Catena Graecorum patrum in beatum Iob (London 1637).

Zandvliet, K., Mapping for Money. Maps, Plans and Topographic Paintings and their Role in Dutch Overseas Expansion during the 16th and 17th Centuries (Amsterdam 1998).

Zuber, Z., 'De Scaliger à Saumaise: Leyde et les grand "Critiques" français', *Bulletin de Société de l'Histoire du Protestantisme Français* 126 (1980) 461–488.

Aarlanderveen See Nooms	Ashworth, William 155
Abel 274n70, 275	Athenaeus 41, 298
Abraham 52, 61n60, 67, 104	Aubert de Versé, Noel 105n87
Abulfeda 141, 146	Aubertus, Petrus 267
Accursius 37	Augustine 34, 53, 59, 268, 305
Adam 43, 51, 61n60, 91, 98, 233, 266, 271–277	Augustinian 107, 108n97
Aeschylus 41, 305–306	Augustus 31, 248
Aethicus 31n55, 301, 304	Aurelianus, Antonius 38, 39n83, 246n12
Africanus, Julius 51–52, 57, 82n124	Aurelius Victor 297, 301–302, 304
Agrippa, Marcus Vipsanius 80	Ausonius 18, 41, 300
Akbar the Great 60	Auzout, Adrien 131n45, 141, 142n85, 145
Alberti, Leon Battista 225	Azariah See Rossi
	Azarlan occ Rossi
	Bacchus 230
Aldre Marretine as a see	
Aldus Manutius 41, 297–298	Bacon, Francis 82, 124–125, 141, 226
Alexander the Great 50, 78n112, 300, 304	Balduinus, Franciscus 302
Alhacen 9, 161, 164, 167, 171	Balsem, Astrid C. xiii, 12, 15n*, 33n68, 41,
Ali, Ismail ibn See Abulfeda	85n*, 95n45, 125n28, 142, 147, 199n39,
Allaci, Leo (Allatius) 48, 308	259n10, 278, 280, 281, 316–317
Almeloveen, Theodorus Janssonius ab	Barberini, Francesco 74
114n122, 115n128	Barlaeus, Caspar 150
Almeyda, Manoel d' 197–198	Baronio, Cesare 34–36, 55
Al-Suyuti, Jalaluddin 76	Basilius, St 298, 305
Altemps, Duke of 38	Baudius, Dominicus 42
Angeli, Pietro 243	Bayle, Pierre 119, 243
Anna, Queen of France 299	Becichemus, Marinus (Scodrensis) 302
Annius of Viterbo 47	Bede 53
Anville, Jean Baptiste d' 205	Bellarmine, Robert 107
Apion 54	Beeckman, Isaac 155
Apis 230	Bellori, Giovanni Pietro 244
Apollodorus 38, 39n83	Beloch, Karl Julius 246n12
Apolloniuses 72	Benivenius, Antonius 300
Apuleius 27	Bennet, Isabella, countess of Arlington
Arator 299	307–308
Aratus 87, 299	Bentley, Richard 22n25, 73, 114
	Berkeley, George 202
Archimedes 132, 148 Archimedean 149, 184	_ ; _ ; _ ;
Aristarchus 72, 73n93	117 P
Aristeas (and <i>Letter of</i>) 8, 87, 110–115	Bernardus, monk 38
Aristophanes 41, 72, 73n93, 87, 297	Bernardus Novariensis 37n78
Aristotle 155, 159, 180, 225, 255, 260–261,	Berosus 47, 104
271, 305	Beuningen, Coenraad van 94n42, 122n17,
Aristotelian(ism) 108, 130–131, 133, 136,	141, 143, 1491122, 151–152, 154, 196, 200,
179, 278	202, 205
Aristoxenus 299, 303	Beverlandus, Hadrianus 26n39, 316
Arlenius, Arnoldus 265	Bibliander, Theodore 51–52
Arpachshad 56, 61	Bie, Alexander de 152
Arrianus, Flavius 308	Bigot, Emery 93n38, 101, 105, 265–267

Birelli, Giovambattista 295, 308	Cambyses 230
Blaeu, family and firm 49-50, 93n27,	Camphuys, Johannes 218
189, 210	Caosino 75n100
Blaeu, Joan 21, 93n27, 191, 209-210	Cappel, Louis 59, 60n56, 61, 91–93,
Blaeu, Willem Jansz. 21	94n38, 111, 255, 259, 263
Blair, Ann 3	Cardanus, Hieronymus 125
Blok, Frans Felix 2, 6, 26n29, 50, 122,	Carolus à S. Paulo (Charles Vialart) 302
124n27, 191, 282, 284	Caron, François 140
Blommaert, Samuel 196	Caron, William 105n87, 140n76, 212
Boate, Arnold 106	Caron children 213n34
Bochart, Samuel 76, 86, 93n38, 111, 162	Carrion, Ludovicus 22n26, 41, 301
Bod, Rens 1	Cartesius (and Cartesian) See Descartes
Bodin, Jean 68, 82	Casanata, Girolamo 97
Bondam, Pieter 291	Casaubon, Isaac 6, 8, 12, 15–20, 21n22,
Bonnell, James 112	
	22–23, 27n43, 29, 33–37, 40–42, 55, 63,
Borch, Ole (Borrichius) 120, 141, 142n84,	297–298, 314 Casaubon, Meric 262
198, 244	
Borel, Pierre 141	Cassianus 299, 304
Bossuet, Jacques-Bénigne 99, 102	Cassini, Giovanni Domenico 123n24
Botero 68	Cato See Disticha Catonis
Boulboul, Laurentius 99–100	Catullus, Caius Valerius 18–19, 25–27, 87,
Bouillon, Godfried van See Bullionensis	149, 313
Boulliau, Ismael 176–177, 178n50, 275n75,	Catulus, Quintus 26
311	Caynam See Cainan
Bourdelot, Pierre 38, 125, 269	Celses, Cornelius 42
Bouvet, Joachim 239n118	Censorinus 38, 39n83, 47n12
Bouwman, André xiii	Cham 227, 228n87
Boyle, Robert 5, 123n24, 125, 146, 147n112,	Chambre, Marin Cureau de la 179n58,
184, 289	180, 200, 205
Brahe, Tycho 147, 160, 163, 287	Chapelain, Jean 1111, 86118, 87, 1241126, 131,
Braun See Browne	139, 140n72, 142–145, 146n106, 147, 149,
Bretagne, Claude 97	179, 198, 199n41, 294, 317
Broekhuizen, Jan van 293n26	Charlemagne 53, 299, 303
Broughton, Hugh 102	Charles I, king of England 88, 253
Browne, Thomas 89, 95n45, 260, 295n34,	Charles II, king of England 2, 4, 9, 11,
30411, 305, 307	113–114, 147, 149, 152, 199, 202–203, 207
Brueil, Père du 101n71	Chaufepié, Jacques Georges 243
Bruyn, Johannes de 178, 180	Chen Ma-no 212
Bullionensis, Godefridus 297	Chifflet, Pierre 246
Burg, carpenter 307	Chou Mei-Yeh 241
Burgh, Coenraad 210n16	Christina, Queen of Sweden 2, 22n25, 33,
Burmannus, Petrus (Sr) 163n18	59, 88, 122–124, 136, 142, 162, 191, 198–199,
Burmannus, Petrus (Secundus) 265n27	210, 259, 268–269, 282, 286–287, 288n18,
Busbecq, Augerus 49, 50n23	293, 312, 315
	Chrysostomus 305
Cadmus 54	Cicero 270, 300–301, 304–305
Caesar, Julius 41, 256n5, 299, 305	Cifres, Alejandro 85n*
Cain 274–275	Clara, Sta 300
Cainan 51, 56, 61–62	Claudianus 42
Cajetanus, Thomas de Vio 108n97	Clement VIII, pope 96
Calderwood, John 105n87	Clivensis (Van Cleve), Henricus 297
Caligula, Emperor 311	Clusius, Carolus 259
Callimachus 87	Cluverius, Philippus 33, 47, 286, 297
Calliphron 33	Coccejus, Johannes 94n42, 257, 265–266,
Calvisius, Seth 56	269

Coccejus, Johannes Hendrik 266 161-162, 168, 170, 174-180, 184, 186, 192, Codinus 42 259, 271n55, 312-313, 316 Colbert, Jean-Baptiste 8, 86–87, 121, 131, (anti-)Cartesian 9–10, 130, 132–133, 141-144, 146-147, 184 137-139, 154, 158, 175, 177-179, 186, 192, Colijn, plumber 307 195, 26on13, 270, 313 Colomiès, Paul 21n25, 22n25, 22n26, Dicaearchus 29, 33 32n65, 42, 87, 106, 262 Dijksterhuis, Fokko Jan 9-10, 32n65, Colvius, Andreas 92n33, 131n45 108n95, 122n20, 130n35, 137n59, 157, Comenius, Jan Amos 152 192n15, 192n18, 204n67 Commelinus, Hieronymus 21n25, 305 Dilthey, Wilhelm (Diltheian) Compton, Henry 101-102, 104 Dinis (Dionysius), king of Portugal 288, Confucius 209-210, 221, 228, 232, 241 298, 303 Diodorus Siculus 47, 252n29, 255, 263, 270 Confucianism 228 Constantine, Emperor 68 Dionysius the Areopagite 8, 299, 304 Conyers, Mr 148 Dionysius rex Lusitaniae 288n19, 298, 303 Cook, Harold 150 Dionysius son of Calliphron 33 Copernicus, Nicolaus 46, 154, 256 Dionysius Thrax 87 Dioscorides 297 Copernican 125 Corbinelli, Jacopo 286, 300 Disticha Catonis 18 Dodwell, Henry 103, 111–112 Cosmas Indicopleustes 38, 140 Craanen, Theodore 260, 262 Doedes, J.I. 268n47 Crasso, Pari 298 Doletus, Stephanus 302 Creates 72, 73n93 Dosicles 29n49 Cremonini, Cesare 286, 300 Dousa, Janus 19 Croes, Gerard 293n26 Du Hamel, Jean-Baptiste 179n58 Croze, Maturin Veyzière de la Dupuy, Claude 16 241n129 Dupuy, Jacques 19115 Dupuy, Cabinet 24 Crucejus 32n65 Cruquius, Jacobus 32n65 Dupuy, sons of 16 Crusius, Paulus 46 Dury, John 88 Cujas, Jacques 22, 25, 26n42 Curtius Rufus 300, 304 Elzevir, firm 49, 74, 170 Emmius, Ubbo 47–48 Cusa, Nicholas 69 Cybele 230 Empedocles 33 Cyprian 38 Enos(h) (Enoch) 51, 109n97 Cyril Lucaris 88 Erpenius, Thomas 286–287, 300 Cyril of Alexandria, St 104 Estienne, Henri I 53n32 Cyrus 98n112 Estienne, Henri II See Stephanus Eunapius 41, 301 Cyrus Prodromus 29n49 Eusebius 27, 33–34, 37, 41, 50, 52–53, 55, Daillé, Jean 94 57, 255, 297, 308 Dale, Anthonie van 114-116 Eutropius 68, 297, 301–302, 304 Dalgarno, George 226, 241 Eve 91, 273-274 Dante Aleghieri 301 Evelyn, John 123n24, 289 Dapper, Olfert 213, 216, 219-221 Eyckius 291n24 Davids, Karel 4, 9-10, 32n63, 122n20, 130133, 132, 142, 143192, 1531148, 159, Fabretti, Raffaello 108 184175, 184175, 189, 212132, 242, 279,

293n28, 317, 255

Deckers, Johannes 66

Denison, Robert 105n87

Derksen, Susan 12, 136n56, 137, 315-316

Descarts, René 1–2, 4, 8–9, 119, 123–130, 132–133, 136–139, 151, 153, 155, 157–159,

Davison, Dr 148

Fabretti, Raffaello 108
Faerno, Gabriele 73
Faria y Sousa, Manuel de 288
Fell, John 88–89, 103
Fermat, Pierre de 162, 176
Festus Avienus 301, 304
Findlen, Paula 3
Flaminius, Nobilis 260
Florus 297, 302

Fohi, Emperor 227, 230, 234, 235, 238
Fontenelle, Bernard de 114
Forster, Johannes 78
Franciscus, St 300
Francius, Petrus 293n26
Freculphus 300, 304
Frederik III, king of Denmark 244
Frénicle, Bernard 145
Froissart, Jean 286n11, 297
Frontinus, Julius 300, 304

Gale, Thomas 89, 90n22 Galen 155, 300 Galileo 100, 211 Galilean 181 Gardie, Magnus de La 751100 Garin, Eugenio 3 Garzo, Johannes 298 Gassendi, Pierre 123n24, 125, 141, 174, 180n62, 184, 291n22 Gassendian 186 Gelasius, pope 301, 304 Gellius, Aulus 26, 27n42 George the Monk See Syncellus Germain, Michel 97, 108 Gibbon, Edward 12, 250, Gillot, Jacques 27n43 Gingerich, Owen 256 Ginsburg, Christian 72n90 Giraldi, Giuliano 286, 301 Glauco 300 Glyca See Michael Goddart, Dr 148 Goerree, Willem 314 Goethe, Johann Wolfgang 9, 186n83 Golius, Jacob 93n37, 152, 170, 196, 207, 210n17, 212 Gool, Niclaes van 142n86 Gouye, Thomas 205 Graevius, Joannes Georgius 11, 103n76, 132n50, 243-244 Graindorge, André 179–180 Grafton, Anthony 3-4, 6-7, 10, 12, 34, 43, 90124, 123-124, 133153, 155, 204167, 207n3, 223n67, 255, 314-315, 317 Grammond, marshal de 148 Graunt, John 253n32 Grebnitz, Elias 239 Grimaldi, Francesco Maria 162 Gronovius, Abraham 158, 291 Gronovius, Jacobus 158, 204, 243, 246, 266 Gronovius, Johannes Fredericus 19116, 36n76, 71, 94, 120, 196, 290-293, 297, 302, 305

Grotius, Hugo 17, 21, 38, 39n83, 42, 91, 270, 287, 308 Gruter, Janus 18, 21n24, 23, 24n36, 26, 36, 42, 286–287, 298 Gryphius, Sebastian 42, 267–268

Halley, Edmond 205 Hamel See Du Hamel Hampden, John 105n87 Hanno the Carthaginian 87 Hardy, Claude 201 Hartlib, Samuel 94n43, 316 Hartsinck, Pieter 213 Haugen, Kristine 73 Heertum, Cis van 296n37 Hegesippus See Josippus Heinsius, Daniel 17, 19, 22n26, 74 Heinsius, Nicolaas 17, 19116, 22125, 24, 27, 33n71, 38, 39n83, 40, 71, 86, 124n26, 124127, 1311142, 1321150, 1401172, 1421187, 143n87, 143n88, 145, 177, 198n37, 199n41, 200, 288n18, 294, 311 Helwig, Christoph 63 Henry IV of Navarre, king of France 15 Hentschel, Klaus 170-171 Herff, Cornelis van 218 Hermia 308 Hermippus 110 Hermonymus 305 Herod 66 Herodotus 47, 49, 270, 275-276 Herrera, Antonio 300 Herwart, Johann Georg, of Hohenburg Hesvchius 104n81 Hevelius, Johannes 123n24 Heyblocg, Jacob 293n26 Hiaouo 75n100 Hieronymus See Jerome Higiemondo 218-219 Hire, Philip de la 205 Historia Augusta 35-37, 39, 42 Hoang, Arcade 212 Hobbes, Thomas 183, 289 Hody, Humphrey 8, 109-114, 116 Hoeschelius, David 29-31, 38-39, 190, 191n8, 298 Hoftijzer, Paul xiii Hohenberg See Herwart Homer 72-73 Hoogstraten, Samuel van 214, 217, 222 Hooke, Robert 123n24, 131, 148, 154, 162, 184-185, 312 Horace 18, 61 Horne, Johannes van 120

Hornius, Georg 43, 45, 72, 75-76, 94n39, 941143, 98-99, 1241126, 208-212, 223, 228, 230-232, 234, 255, 279 Horthemels, Daniel 210114 Housman, Alfred E. 104 Hubner, Johan 252 Hudde, Johannes 131, 132n49, 153-154, 177-178, 183, 196, 202 Huet, Pierre-Daniel 9, 86n7, 88, 162-171, 174-176, 177n46, 179-181, 183n73, 198 Hugo de St Victor 299 Hulsius, Antonius 94n42, 257, 260, 265n26, 269 Hume, David 250, 252 Hungtington, Robert 102 Huygenses, the 9, 186 Huygens family 316 Huygens, Christiaan 1, 3, 4, 8–9, 119–123, 131-132, 140-141, 147, 151, 154-155, 162, 170, 176-178, 179n58, 181, 183-184, 186, 196, 197131, 199-200, 211, 218, 311-312, 316-317 Huygens, Constantijn 8, 120–121, 122n16, 141, 151, 170, 176, 217-218 Huygens Jr, Constantijn 95n45, 281, 308, 316 Huygens, Lodewijk 121, 140n76, 177n47, 178n53, 199n43 Hyginus 301

Iehuda See Jehuda
Ignatius (and Epistles of) 35, 85, 87, 89, 108
Innocentius X, pope 228
Isidore of Charax 38, 39n83
Isidore of Seville 299
Isis 230
Israel, Jonathan 114, 117, 207, 241–242, 314–315
Israel, Menasseh ben 101n67, 217
Ivo Cartnotensis 301, 304

Jacob 50
Jacobus Achoriensis 198, 303
Jansonius, Johannes 33
Janus Lascaris 300–3011**
Jareth 51
Jeannin, Pierre 297
Jebb, Samuel 110
R. Jehuda Aben Tybbon 791115
Jelles, Jarig 1471110, 2421132, 315112
Jeremiah 78
Jerome, St (Hieronymus) 21125, 27, 33–34, 52–53, 55, 59, 70185, 96, 107, 260, 299, 301, 304

Jesus Christ 48, 56, 66, 100n66, 101, 111, 115, 209, 228, 232, 244, 254, 262, 276 Ioannes Cantavicenus 305 Jonge, Henk Jan de 43n* Jorink, Eric 1, 8, 10–11, 15n*, 83, 85n*, 86n8, 119, 176n45, 177n49, 183, 184n75, 189n4, 192n18, 212n30, 212n33, 213n34, 218n53, 255n*, 259n9, 270, 293n28, 311, 314, 317 Joseph 230 Josephus, Flavius 12, 47, 54-55, 60-62, 66, 78-79, 81, 93, 103-104, 111-114, 255, 260, 263-269, 275, 279 Josippus 298 Jovian 69 Julian Apostata, Emperor (Julian) 69, 301 Junius, Adrianus, from Amsterdam 292-293, 305-306 Junius, Franciscus the Elder (François du Jon) 17, 32, 42, 261, 266-267 Junius, Franciscus the Younger (Francisci F.) 42, 88, 89n16, 95, 196, 198, 260, 266, 288–289, 291122, 293126, 295n34, 307-308 Junius, Hadrianus, from Hoorn 47 Junius, Johann Casimir 48 Justel, Henri 99n62, 101n71, 105n85, 106, 132n47, 184n73 Justin Martyr 87, 97n50, 108n97 Justinus (historicus) 299, 303

Kainan See Cainan
Karl I Ludwig, Elector Palatine 170
Katz, David 123, 149, 203, 314
Keblusek, Marika xiii
Kepler, Johannes 9, 66, 125, 155, 161–164, 167, 175, 178n50, 186
Keplerian 178, 186
king of Poland 297, 302
kings of China 44
Kircher, Athanasius 4, 10, 75–76, 125, 155, 197, 201, 206, 210–213, 225–232, 234–238, 242, 312–313
Knorr von Rosenroth, Christiaan 119, 218
Koerbagh, Adriaan 314–315
Koopman, Paul xiii

Labbaeus, Carolus 23 Lachmann, Karl 18 Lactantius 306 Lamech 51 Langermann, Lucas 22n25, 38, 39n83 Lavaña, Baptista 288n19, 303 Leers, Reinier 105n87, 106

Martinus Polonus 306

Leffen, Pieter 283–284, 297 Mathusaleh 51 Leibniz, Gottfried Wilhelm 142, 234, 238, Matthew 86n7, 89 239n118-119, 240, 316 Mauritius, Emperor 308 Meer, van der 131n45 Lem, Anton van der xiii Leo X, pope 298 Mei-Yeh See Chou Levine, Joseph 83 Mela 9, 32, 91, 130, 132, 140, 157–163, 168, Levita, Elijah 79 170, 174, 176-177, 181, 186, 189, 191-192, Lightfoot, John 102 196–198, 200, 204, 275, 297, 300, 302, 311, Lionne, Sir de 143n93 Menasseh See Israel Lipsius, Justus 12, 17n7, 27n43, 40, Mencius 221 247-248, 250, 253 Livy 297, 302 Mendoza, Juan González de Llovd, William 103 Meneses, Sebastian Cesar de 299 Locke, John 119, 154n155 Menippeus, scriptor Peripli 33n67 Loo, Gerrit Potter van der Mercator, Gerardus 49 Loop, Jan 198n35 Mercier, Josias (Mercerus) 37, 41, Louis XIV, king of France 8–9, 107, 121, 286-287, 297-298, 301 131, 140, 142-145, 184, 189, 199-201, 203, Mercury 228n89 Merret, Christopher 123n24 251, 293, 317 Louis XV (as Dauphin) 99 Merula, Paulus 293n26 Lovell, Archibald 202 Meurs, Iacob van 2111147 Mews, Peter 112 Luke 56 Lycophron 18–19, 22–24, 87 Mever, Lodewijk 314 Michael Glyca 305 Ma-no See Cheng Miert, Dirk van 1, 11-12, 15, 43n*, 85n*, Mabillon, Jean 97–99, 107–108, 115–117 94n42, 119n*, 124n27, 133n53, 139n69, Macaulay, Thomas Babington 253 148n116, 157n1, 190n6, 192n15, 259n10, Maetsuycker, Joan 196 286n10, 311, 314 Magalotti, Lorenzo 131, 138n65 Millius, David 261 Magnus, Iohannes 751100 Mirandola, Giovanni Pico della 78 Maignan, Emmanuel 179n58 Monconys, Balthasar de 119-121, 131, 154, Maimonides 79 183-184, 218n52 Maiorianus 300, 304 Montebello, Marquess 286n11, 303 Maizeaux, Pierre Des 316 Montesquieu 11, 251, 252n19 Malaleel (Maleleel) 51 Montmor, Henri Louis Habert de 125, 141, Malchus 299, 304 142n84, 179, 181, 183 Manilius 18, 33-34, 38, 39n83, 71 Moray, Robert 148, 178n51 Mandelbrote, Scott 7–8, 12, 15n*, 34, Morin, Étienne 115 43n*, 85, 123, 133n53, 149n125, 207n3, Morin, Jean 56 Morus, Alexander 16 223n67, 245n5, 257n7, 265n26, 269, 281n1, 296n27, 315 Moschion 289, 300, 304 Manetho of Sebennytos 34, 38, 39n83, 47, Moses 44, 54, 57, 60n57, 63, 67, 70, 62-64, 65n70, 67, 68n80, 69-70, 76, 93 92-93, 99, 228, 266n35, 269, 271, 272, Marcianus from Heracleia 33 Marcilius, Theodorus 23 Mothe le Vayer, François la Maria (virgin Mary) 301 Mout, Nicolette 85n* Marsh, Narcissus 71, 76n106, 84, 102, 149 Mouveaux, Jehan de 53n32 Marshall, Thomas 198, 289, 291n22 Moyne, Étienne Le 89117 Martial 18 Mulerius, Nicolaus 47 Martianay, Jean 115–116 Müller, Andreas 211, 240 Martianus Iurisconsultus 300, 304 Muret, Marc Antoine 26n28, 41, 301 Martianus Capella 299–300, 304 Nabonassar 46 Martini, Martino 10, 44, 50, 65–67, 71, 75, 91-93, 197-198, 206, 212123, 2311101, 262 Nansius, Franciscus 42, 260

Nassau, Willem Hadriaan van 307

Nativel, Colette 11, 12, 243 Petau, Denis 57-58, 60-61, 63, 84, 302 Nefraim 227, 228n87 Petau, Paul 269 Nepos, Cornelius 42, 297, 302 Petit, Pierre 132n50, 141, 142n84, 179-180 Neveu, Bruno 85n* Petraeus, Theodor 289 Newman, Barnett 46 Petty, William 251n26, 253n32 Newton, Isaac 3-5, 84, 122, 155, 162, Peutingeriana tabula 31 186n83, 312 Peyrère, Isaac de La 7, 12, 43-45, 83, Newtons, the 9, 186 91-93, 94n38, 94n42, 137, 269-277, Nicander 297 Nicheus, Joannes 96 Pezron, Paul 115-116 Nierop, Henk van xiii Phalaris 305 Nieuhof, Joan 140, 213, 216, 218n52 Philo 78, 87, 112, 311 Phranza, Georgius 9, 300 Noa(h) (Noe) 51-52, 58, 67, 72, 76n107, Pignoria, Lorenzo 230 77, 91, 96, 104, 109n97, 124, 227, 230, 234, Pisistratus 72, 73n93 266, 277 Pithou, Pierre 1511, 19 Nonius Marcellus 42, 305 See also Pythaeus Nooms, Wilhelm 268 Pius, Johannes Baptista Nouhuys, Tabitta van 85n* Plantin, Christopher 26, 41, 301 Plato 11, 78, 208–209, 228, 270, 276n79 Odoric of Pordenone 255 Platonici 299, 303 Plautus 42, 305 Oldenburg, Henry 2, 74, 119, 121, 122n16, 123n24, 132n47, 147-149, 155, 183n73, 185, Pliny the Elder 30, 38–39, 246–247, 250, 211n21, 312, 316 252-253, 268 Olivarius, Petrus 33 Pliny the Younger 301, 304 Olympiodorus 299, 303 Plutarch 41, 298, 301 Ommen, Kasper van xiii Pococke, Edward 71n88, 76, 84, 102, 109, Origen 52, 86n7, 88-89, 94n42, 100, 111-112 104n81, 113 Poliziano, Angelo 25 Orpheus 18 Polo, Marco 207, 255 Osiris 230 Polonus See Martinus Polybius 41, 297 Ossa-Richardson, Anthony 1, 119, 255, 311 Ovid 299 Pomponius See Mela Owen, John 89 Poncet, Jacques 203 Porta, Giambattista della 125 Portus, Franciscus 306 Paes, Pero 10, 197, 201, 203, 206 Palmerius, Jacobus 295, 308 Postel, Guillaume 55 Papianus 300, 304 Potter See Loo Papinius See Statius Priscianus 299, 303 Paris 157n1 Procopius 298 Prudentius 300 Parker, Samuel 103n78 Patin, Charles 218 Psellus 308 Pausanias 41, 297 Ptolemy (geographer) 10, 32, 46, 87, 155, Pearson, David 256 158, 189-193, 196 Pearson, John 85, 89, 104, 106, 117 Ptolemy (king) 64 Pedro, Conde de Barcelos 288, 303 Ptolemy II Philadelphus, king 87, 110 Peiresc, Claude Fabri de 4, 193n21, 286, Publilius Syrus 18 289, 291, 297 Pulmannus, Theodorus 42 Pell, John 94n43, 123n24 Pussa 230 Pelsaert, Franciscus 299 Putschius, Elias 41, 42, 299 Perez, Antonio 300 Pythaeus 301 Perizonius, Jacobus 265n27 Pythagoreans 299 Perotti, Nicolò 24 Persius 23, 299 Quantin, Jean-Louis 85n*

Quaranta, Horatius 96, 97n50

Petau, Alexander 24, 269

Queen of Poland 148 Schefferus, Johannes 308 Ouintilian 297, 302 Scheiner, Christoph 161, 163 Schijnvoet, Simon 218 Schoenaers, Dirk 286n11 Redi, Francesco 131 Rembrandt van Rijn 214–215, 217, 222 Schooten, Frans van 151, 153 Remigius Antissiodonensis 299 Schotanus, Christian 74, 265n26, 269 Schottus, Andreas 32n65 Remus 47 Renaudot, Eusèbe 240 Schott, Gaspar 197 Schral, supplier 307 Reuchlin, Johannes 78 Rhetorica ad Herennium 301, 304-305 Scriverius, Petrus 18, 23, 286–287, Rhodantes 29n49 298-299 Ricci, Giacomo 107 Scylax of Caryanda 9, 29-31, 87, 189-191, Ricci, Mateo 109 Riccioli, Giovanni Battista 123n24. See also Vossius, Isaac > Periplus 197-198, 206 Scymnus of Chios Sedulius 299, 300 Richardson, Thomas 113n115 Richelieu 24 Selden, John 7 Seneca (the Younger) 298, 301, 303, 304 Ricobaldi, Gervasius 298 Rigault, Nicolas 16 Servius 28n45 Risner, Friedrich 161 Seth 51 Rivet, André 16, 35 Shem 56 Roberval, Gilles de 145 Shen Fuzong, Michael 212 Roetert, Ernst 218 Sidonius Apollinaris 42 Rolevinck, Werner 53 Silius Italicus 42 Romulus 47, 302 Simon, Richard 8, 99–102, 104–107, Rossi, Azariah' de 78 110-111, 1121112, 116-117, 244-245, Rudolph II, Emperor 147, 286–287, 300 314-315 Rufinus 266-267 Siquiera, Emmanuel de 212n33 Ruinart, Thierry 97, 1161126, 1161127 Sirmond, Jacques 286, 299, 303 Ruler, Han van xiii Sixtinus 305 Russi, Sr de (Elve de la Place) 297 Sixtus V, pope 96, 107 Slingelandt, Govert 279 Saint-Évremond, Charles 83n127, 109, Smith, Thomas 99n62, 114n119 316n14 Snellius, Willebrord 9, 158, 170–171, Sallust 297, 300, 302 175–176, 181, 185, 192 Samuel 78n112 Snellius, son of Willebrord 170 R. Samuel 79n115 Snow, C.P. 3 Sandarus 300 Socrates 308 Sandrart, Joachim von 215–219 Solinus 30, 35, 39, 300 Sapor 69 Soll, Jacob 142, 146 Sarrau, Claude 16, 76-77, 86n7, 91n25, Solomon, king 50 259, 286, 287, 298, 300, 303 Solon 276-277 Saumaise, Claude 6, 8, 15–23, 24n36, 25, Sophocles 18 28-30, 31156, 32-42, 77, 86117, 92, 111, Sorbière, Samuel de 119, 130 124, 139, 158, 162, 190-191, 198, 200, 246, Spanheim, Ezechiel 104-105 284, 286-287, 294n22, 297-299, 301, Spanheim, Friedrich 104n83 313-314 Spartianus 38, 39n83 Savaro, Johannes 42 Spinoza, Benedictus 81, 83, 117, 131, Scaliger, Josephus Justus 2, 6-8, 12, 15-23, 138, 142, 147, 154-155, 211, 242, 270, 312, 25-29, 31-35, 37-38, 39n83, 40-42, 314-316 44n5, 46-50, 51n28, 55-57, 59, 62-65, 71, Spinozis(m/t) 106, 154, 315 Statius, Papinius 225n77 83-84, 90, 92-93, 104n80, 111, 124, 179, 255, 259, 263, 277, 286-287, 300-301, Steno, Nicolaus 141, 146n106 313-314 Stephanus of Byzantium 29n49 Scaliger, Julius Caesar 19 Stephanus, Henricus 20, 22, 29, 41-42, 297

Stephanus, Henricus I See Estienne
Stephanus, Robertus 41
Stevin, Simon 125, 155
Strabo 29, 33, 252n29, 270, 297
Strato 299, 303
Strick, Leonard 158n6
Strype, John 112n112
Swammerdam, Johannes 131–132, 138, 140–141, 142n86, 146, 154
Swieten, Christina 218
Sylburgius, Fredericus 20, 21n25, 22n25
Syncellus, George (the Monk) 55, 57, 104n80

Tacitus 308 Taraghy, Mirza Mohammed See Ulug-Beg Taubmannus, Fridericus 42 Tellez (Telesius), Balthasar 198 Terence 73, 298–299, 301, 304 Tertullian 35, 39, 42 Theocritus 19-20 Theodoretus of Cyrus 97 Theodosius 247 Theophylactus 41, 300 Thévenot, Jean de 139 Thévenot, Melchisédech 121, 125, 138n65, 139-141, 142n84, 142n86, 145-146, 147n111, 148, 181, 196, 197131, 198, 212, 218 Thomson, Richard 24 Thorndike, Herbert 86n7, 89, 117 Thou, Jacques-Auguste de 16, 24, 286 Thuanaea 298 Thrax See Dionysius Thrax Tiberius, Emperor 308 Tibullus 26n38, 71 Tissenhaus 38, 39n83 Toland, John 314 Toletanus, Julianus 301 Toletus, Franciscus 62 Tollius, Cornelius 33n70 Tolosani, Giovanni Maria 51–52 Torrentius, Laevinus 42 Torricelli, Evangelista 138, 211 Trigault, Nicolas 75, 216n45, 224 Trismegistus, Hermes 8, 227–228, 230, 232n105

Ulug-Beg 143 Ursatus, Sertorius 302 Ussher, James 7, 35, 59–60, 69, 86, 94n43, 106, 261

Valentinianus 300, 304 Valeriano, Pierio 73

Tybbon See Jehudah

Valerius Flaccus 41–42, 301 Valerius Maximus 298, 302 Valesius (Henri Valois) 60, 308 Valla, Lorenzo 68–69 Valle, Pietro della 56 Van Cleve See Clivensis Vanderjagt, Arjo xiii Vauban, Sébastien Le Prestre de 251, Veen, Jaap van der 293n28 Vegetius 297, 300, 302, 304 Veil, Charles-Marie de 102, 105, 106n88 Venusinus, Bartholomaeus 302 Verbiest, Ferdinand 197 Vere, Aubrey de 94-95 Vertunien, François Vettori (Victorius), Pietro 25, 300 Vevzière See Croze Vialart See Carolus à S. Paulo Vicquefort, Abraham de 308 Vinet, Elie 41, 300 Virgil 18, 72-73 Vitellio See Witelo Vitruvius 250n22 Vives, Juan Lius 53n30 Vlacq, Adriaen 58, 92, 98n58, 178, 311 Vondel, Joost van den 212 Vossius, Dionysius 79, 207n4, 268, 308 Vossius, Gerardus 281 Vossius, Gerardus Johannes 1, 3, 6-7, 16-17, 33n70, 45, 48-49, 62-71, 79, 85, 95, 111, 121n36, 133, 145, 149, 215, 223, 225, 232, 2391120, 241, 260, 281-284, 286, 300, 307, 314 Vossius Gerardus Johannes Jr 32n65, 42, 95n45, 103n77, 281, 293, 295 Vossius, Isaac: passim Ad Colvium epistola 98n58 'Ad priores et posteriores P. Simonis objectiones responsio' 244-245 Appendix 94n41, 279 'Appendix ad scriptum de natura et proprietate lucis' 132n50, 180–182 Castigationes ad objecta Georgii Hornii 26n40, 65n71, 73n93, 76n105, 93n37, 98n58, 210n15, 201n16, 211n25, 226n83, 231n99 Catullus, edition of 26-27, 87, 149, 313 See also Catullus 'De antiquae urbis Romae at aliarum urbium magnitudine' 244-245 'De apparentibus in luna circulis' (and craters, mountains and spots on the moon) 2, 132, 142, 148–149, 184, 185n77, 244-245

See also Scylax

'De artibus et scientiis Sinarum' 'Responsio ad objecta Christiani 213, 222-223, 232, 240, 242, 244-245 Schotani' 78n110, 98n58 'De emendatione longitudinum' Responsum ad objecta 130n41, 178–179 32n64, 189, 191, 193, 198, 244-245 Variarum observationum liber 11, De lucis natura et proprietate 2, 108, 32n64, 83n125, 106n89, 149, 185n77, 126, 128, 130, 158, 165, 170-174, 176-182, 189, 91, 193, 198n36, 208, 214n37, 184, 186, 192, 204, 259 214139, 223, 232, 244, 245114, De motu marium et ventorum liber 10, 246nn6-7, 247nn9-10, 248n13, 32, 120, 132, 137-138, 103n67, 143, 149, 248n16, 249 189, 192, 195, 200-205, 273 Vossius, Matthaeus 199 De Nili et aliorum fluminum origine 10, Vries, Scato Gocko de 294n32 Vulcanius, Bonaventura 305 32n63, 131n45, 132, 133n52, 135, 143-144, 180, 182, 189, 191, 193-194, 196n29, 197, 198n35, 200-201, 317 Waard, Cornelis de 170 Wallis, John 123n24, 205 'De origine et progressu pulveris bellici apud Europaeos' 244-245 Wals, Henk xiii 'De patefacienda per septentrionem ad Walton, Brian 61-62, 67, 81, 89 Ward, Samuel 123n24 Iaponenses et Indos navigatione' 32n64, 189, 244-245 Webb, John 233 Welser, Marcus 31 De Sibyllinis aliisque quae Christi natalem praecessere oraculis Weststeijn, Thijs 4, 10-11, 93n37, 123n23, 100n65, 101n68, 108n95, 232, 244-245 153n146, 197n32, 207, 279 Wetenhall, Edward 112n112 De Septuaginta interpretibus 12, 26n39, 74n97, 75n98, 78nn111-112, Whitelock, Bulstrode 88-89 79n116-80n118, 81nn119-123, 94, Wijnkoop, Jan 218n55 95n44, 97, 98n58, 100n66, 104n80, Wilkins, John 123n24 108, 1101102, 1111107, 1121113, 1131115, William III, prince of Orange 261-263, 267 Willis, Thomas 123n24, 289 'De triremium et liburnicarum Winthrop Jr, John 123n24 constructione dissertatio' 243-245 Witelo 9, 161, 163–164, 166 Dissertatio de vera aetate mundi 2, Witsen, Jan 218 Witsen, Nicolaas 152-153, 177, 196, 203, 7-8, 12, 43n2, 44n4, 44nn6-7, 45, 50n24, 67nn78-79, 79n83, 70nn85-86, 212-213, 218, 240 71, 74n95, 77, 79, 92, 93nn35-36, 94, Witt, Johan de 150–151, 153, 177–178, 98n58, 108, 123, 124n25, 136, 139n67, 179n56 204, 255-256, 262-263, 265, 269, Woerdanus, Johannes 284ng 271-273, 275-276, 278-279, 311, 315 Worm, Ole 212n33 Dissertation touchant l'origine du Nile Wowerius, Joannes 72 201nn51-54 'Diurna telluris conversione omnia Xaverius, François 197 gravia tendere ad medium' Xavier, Jerome 60 Xenophon 41, 297, 299, 303 Observationes ad Pomponium Melam de situ orbis 92n29, 130, 158, 160, Xinnungo 75n100 189, 192n16, 196n29, 197-198, 200, 204, 275-276 Young, Patrick 7, 89, 90n22, 106, 268 Observationum ad Pomponium Melam appendix 32n65, 106nn89-90, Zenodotus 72, 73n93 1141117, 1171129 Zonaras 298, 302 See also Mela Zulcon, M. de 217n52 Periplus Scylacis Caryandensis 9, 29-31, 189-191, 200